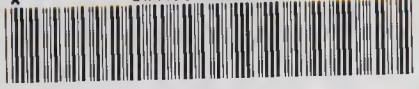


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ANNUAL REPORT  
ON  
VOCATIONAL EDUCATION  
IN

MASSACHUSETTS  
1980

GOVERNMENT DOCUMENTS  
COLLECTION

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PREPARED BY  
THE MASSACHUSETTS ADVISORY COUNCIL  
ON

VOCATIONAL-TECHNICAL EDUCATION  
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DECEMBER 1980

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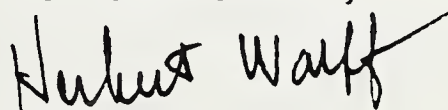
Mrs. Anne H. McHugh, Chairperson  
Massachusetts Board of Education  
31 St. James Avenue  
Boston, Massachusetts 02116

Dear Mrs. McHugh:

The Massachusetts Advisory Council on Vocational-Technical Education is required, under Section 105 of Public Law 94-482, to prepare an annual report outlining the Council's assessment of the degree to which the vocational education system is meeting the needs of the Commonwealth's citizens, and to make recommendations for change, where appropriate. This Annual Report is addressed to the Board of Education, which must then submit it to the U.S. Department of Education, together with the Board's responses to the State Council's recommendations.

The Council is pleased to present its Eleventh Annual Report, covering the (federal) fiscal year 1980. The Council appreciates the excellent working relationship we have with your Board and with the staff of the Division of Occupational Education. We hope that our Report and recommendations will assist the Board in its efforts to strengthen the quality of vocational education in Massachusetts.

Respectfully submitted  
for the Council,



Herbert Wolff  
Chairperson

HW/hmh



## FOREWORD

Statewide planning for vocational education in Massachusetts over the next five years will be heavily influenced by three variables. First, and most significant, is the effect of "Proposition 2-1/2," a tax-cutting measure passed by Massachusetts voters on November 4, 1980 and due to take effect on July 1, 1981. The cuts in school budgets necessitated by Proposition 2-1/2-related losses in local tax revenue will affect everything from teachers' jobs to hand tools and supplies for students. The State Board of Education and Commissioner of Education have taken the lead in working closely with educators and municipal officials to map a rational response to the voters' mandate, while trying to minimize cuts that will seriously erode the quality of public education. At the time of this writing, however, no one has the hard data necessary to show convincingly what effect Proposition 2-1/2 will have on vocational education, and no coherent plan exists for dealing with what amounts to a fiscal crisis for most school committees.

A second variable is the structure and content of the reauthorized federal Vocational Education Act, due to expire on September 30, 1982, and currently the object of close scrutiny by various federal and state committees, including State Advisory Councils on Vocational Education (for this Council's position, see Chapter III). A central issue in the testimony and debate attendant to reauthorizing the Vocational Educational Act is the nature and scope of the federal government's role in public education.

The third variable affecting state planning is the level of federal support of vocational education. There are those who maintain that high levels of federal vocational education funding can no longer be justified. This Council believes that such generalizations ignore the available evidence and are irrational in the face of national needs for skilled, productive workers; nevertheless, there is a good chance that the long decline in federal support in real dollars for vocational education will accelerate over the next few years.

Clearly, there are difficult times ahead. But the Massachusetts Advisory Council on Vocational-Technical Education is confident that a compelling case can be made for local, state and federal funding of vocational education at levels adequate to guarantee the continuation and expansion of those programs which contribute directly to economic revitalization. The Council will assist in every way possible to define the issues and elevate the level of public debate; in the process, we will continue to advocate for quality vocational education, no matter how clamorous the demand for "cut-backs" may become.

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# EXECUTIVE SUMMARY

## 1980 Annual Report of the Massachusetts Advisory Council on Vocational-Technical Education

### Introduction

The FY 1980 Annual Report of the Massachusetts Advisory Council on Vocational-Technical Education (the Council) describes activities undertaken by the Council during 1980\* pursuant to its mandate under Public Law 94-482, the Education Amendments of 1976. The Report also presents recommendations pertaining to the planning, evaluation, administration and delivery of occupational/vocational education programs and services in the Commonwealth of Massachusetts.

This Report is based on Council observations, on expressions of concerns by citizens at public meetings, on discussions with educators, on information distributed by the Division of Occupational Education and other agencies of state government, on contractual studies commissioned by the Council, and on studies conducted by the Council staff.

### A. Planning

The Council is satisfied that the Division of Occupational Education (the Division) has made a good faith effort to address most of the concerns and issues raised in the Council's FY 1979 Report and throughout the FY 1980 planning cycle. While there is still room for improvement, particularly in the areas of specific goals and criteria for evaluation, the Council recognizes continuing movement toward comprehensive planning. Some noteworthy changes are cited in the following paragraphs.

1. New formulas were developed for allocating P.L. 94-482 funds, by category, among eligible recipients. Designed to more accurately reflect concentrations of low income populations and local ability to provide resources, the formulas are effective for fiscal years 1981 and 1982.

---

\* School year 1979-1980.

2. School districts may now use up to 50% of the Balance of Subpart 2 funds available to them under P.L. 94-482, to maintain programs previously funded with federal dollars, or to replace obsolete or broken equipment. Federal funds may not be used to supplant local expenditures, and there is a \$100,000 limit on this option, but it should help local education agencies cope with economic circumstances beyond their control.

3. The Plan now contains language specific to the occupational education needs of minority youth, which is a step forward. To the Council's knowledge, however, the "procedures to increase minority enrollments", first suggested in the FY 1980 Plan, and reiterated in the current Three-Year Plan, have yet to be fully implemented. This is not to say that the Division is doing nothing, for the 1980-1982 Plan specifically sets priorities among eligible applicants, programs and populations, including minorities. But the Division needs more effective strategies for increasing enrollments of minorities.

4. The Council takes special note of a major change in the local planning process, which speaks directly to our longstanding concern for better integration of state and local planning. For the first time, local education agencies seeking P.L. 94-482 funds are required to develop Local Plans which include needs assessments for their local areas. The Council commends the Division for developing the Local Plan process and looks to its continued refinement.

5. The State Plan uses two approaches to incorporate labor market information in the vocational education planning process: (1) an analysis of state-wide demand and supply of labor related to vocational education and (2) updated employment information for twelve sub-state areas. The data and brief analysis given to LEAs provide the groundwork for assessing the implications of local economic conditions for vocational education planning. The labor market information was provided through the cooperative effort of the Division of Occupational Education and the Department of Manpower Development, and the Council recognizes the great strides made in this critical function over the last four years.

6. The FY 1981 and 1982 State Plan contains statements on evaluation and on proposed research and program improvement activities. Both statements are positive additions to the State Plan and, in particular, the Council is pleased to note the creation of the Bureau of Planning, Research and Evaluation within the Division of Occupational Education, and the inclusion of its mission in the State Plan.

### Conclusions

The Council recognizes an increased spirit of cooperation which has opened up the planning process, as required by P.L. 94-482. The willingness of the Division of Occupational Education to listen to diverse points of view, and to incorporate suggestions in the State Plan, has produced a document that is potentially more useful to local education agencies than had been the case before 1978. We say "potentially" because the State Plan needs to be more widely distributed and discussed if it is to have maximum impact. Although our evidence is anecdotal, the Council believes that few local school committees or administrators are really familiar with the contents of the State Plan. And in our judgment, the document sent to Washington does not adequately describe what is actually happening by way of vocational education services in Massachusetts--with the possible exception of dollar allocations. Furthermore, the lack of enthusiasm for state-level planning is unlikely to change in the absence of significantly increased state and federal financial aid.

The Council believes that the Division of Occupational Education is moving in the right direction by emphasizing local planning and providing technical assistance in planning to LEAs. We reiterate our long-held conviction, however, that there also must be a system of statewide planning, which produces a coherent, detailed statement of goals and objectives emanating from an overall planning philosophy. Not a philosophy from Washington, but one which reflects the Commonwealth's economic development needs, and the educational needs of its citizens.

Moreover, statewide planning for vocational education over the next five years will have to take into account the impact of "Proposition 2-1/2", a tax-cutting

measure passed by Massachusetts voters on November 4, 1980 and due to take effect on July 1, 1981. The cuts in school budgets necessitated by Proposition 2-1/2-related losses in local tax revenue will affect everything from teachers' jobs to hand tools and supplies for students. The Board and Commissioner of Education have taken the lead in working closely with educators and municipal officials to map a rational response to the voters' mandate, while trying to minimize cuts that will seriously erode the quality of public education. The Council believes the State Plan for Vocational Education is the logical vehicle for providing information, data and illustrations of just what the impact of Proposition 2-1/2 will be on vocational education, together with a systematic approach to dealing with the new realities presented by this tax reduction law.

#### B. Evaluation

The Council is pleased to note a description in the State Plan for 1981-82 of plans for evaluation over the next three years. The newly created Bureau of Planning, Research, and Evaluation has stated its intention to coordinate with the Bureau of Financial Management and the Bureau of Program Services, in conducting evaluations in each local education agency receiving federal or state funds for vocational education.

The results of these evaluations will be used to determine priorities for utilization of human and fiscal resources, to revise the Division of Occupational Education's Annual Plan, and to improve the quality and effectiveness of local planning efforts and programs. A summary of program evaluations conducted under the auspices of the Bureau of Planning, Research and Evaluation will be included in the State's Annual Accountability Report submitted for that fiscal year. Finally, results of the evaluations will also be transmitted to this Council for use in developing its Annual Report.

The evaluation process described above is a sound beginning. The Council looks forward to the time when it can reach an understanding with the Division as to: (1) what questions need to be asked in order to know whether the goals set forth in the State Plan are being achieved; (2) how best to get answers to these

questions; and (3) how to use the results of evaluation to redefine the goals and objectives of the State Plan.

The Council is convinced that the State knows how to evaluate vocational education programs. The Council has participated in onsite evaluations conducted by the regional centers of the Division of Occupational Education, and, although the regions are not equally strong in this regard, there is ample evidence that given enough staff and a sufficient amount of funds, the Division could move faster to develop standards and procedures under which all programs would be monitored effectively and the results reported in a standardized format. But the fact is that the regional centers do not have enough staff, nor do they have budgets sufficient to permit more than a sampling of programs in operation. As matters now stand, program experts for evaluation teams are drawn from schools other than the one being evaluated; some schools send three or four teachers several times each year and the sending schools are not compensated for the cost of substitutes.

Even with these constraints, the Division managed to evaluate a reasonable sample of both federal and state supported programs funded for FY 1979. In the absence of significantly increased resources, the State will have to rely more on LEAs to do their own evaluating, and the Council notes that the instructions for completing the application for federal funds (form BPRE-4) now include guidelines for developing a project evaluation plan. Our only criticisms of these excellent guidelines are: (1) they are too brief, and (2) they do not ask the evaluator to relate the project to State Plan goals and objectives.

The Council has maintained consistently that the goals and objectives suggested in the Five-Year Plan are not specific enough to be of much operational value, either to the Division or to local education agencies. Goal I, which projects enrollments, has proved to be singularly nettlesome, since it uses, as a baseline, data that were unreliable to begin with, makes projections without any apparent supporting rationale, does not specify what "increased enrollments" really means (enrollments in programs, or courses?), and does not say how increased enrollments will be achieved. Moreover, now that the Division is making significant

progress toward upgrading its data collection and processing capacity, the State is in the curious position of having goals that may be too fuzzy to evaluate quantitatively with the analytical tools about to come on line. Since the U.S. Department of Education has never objected, however, and since the most recent Three-Year Program Plan approved by Washington take us to the end of the current long-range planning cycle, the Council will drop this issue--at least until the Vocational Education Act is reauthorized.

What, then, can be said about movement toward long-range goals? If one takes a synoptic view of the State's accomplishments, there can be no doubt that significant progress has been made: federal funds are now concentrated in areas of greatest need; there are more women, minorities, disadvantaged and handicapped students enrolled in vocational education; both state and local planning have improved; procedures for monitoring and auditing expenditures have been tightened up; the state school-aid formula has been amended to recognize differences in local resources (although we do not yet know whether this has been beneficial to vocational education); there is better coordination between public education and CETA, and between the secondary and postsecondary levels; the Department of Education's data processing ability has improved considerably; and vocational educators are at least more aware of the State's economic development needs.

If one tries to ask quite specific questions about such matters as who is being served in what programs, or students' post-graduation employment experiences, or the quality and relevancy of programs offered, or even the relationship between total enrollment changes and federal aid, Massachusetts (and most other states) still can provide only partial answers. As has been previously noted, the Division is making impressive progress in its data processing capability and, barring a dramatic cut in funding, by the end of 1981 should be able to produce valid, reliable numbers in a format such that the data will be informative to the Board of Education and others.

### C. Accountability Report

The FY 1979 Accountability Report--the second required under P.L.94-482--is included in Appendix B. The Council reiterates its position that the Accountability Report should communicate to the general public the Division's analysis of progress being made toward achieving State Plan goals, and the implications for future planning of successes and failures. While the second Report is an improvement over the first, it is still basically a compliance document, which apparently satisfies the U.S. Department of Education, but which is of little use to those seeking to understand the rationale for policy changes and funding priorities.

The distribution of P.L.94-482 funds during Fiscal Year 1979, detailed by subpart and eligible recipient, is contained in the Accountability Report. Although the accounting for expenditure of funds is extremely complex (because the time limit for use of federal funds bridges two fiscal years) it does appear that all the minimum set-asides required by the federal legislation have been met. The requirement that federal funds be at least matched by state and local resources was also met.

### D. Vocational Education Needs of Economically Dis- Advantaged Black and Hispanic Youth

After considering both national and local evidence, the Council concludes that unemployment continues to fall heavily on disadvantaged Black and Hispanic youth and that, too often, vocational education of superior quality has been characterized by its appropriateness for White, middle-class youth, who by reason of family or cultural background already have access to employment markets and specialized trades. Skill training for those who need it most has tended to receive support in inverse proportion to economic need, and the pattern of inequality in job opportunities and in economic results has been reinforced.

The Council believes that the consequence has been neither equitable nor efficient from a social point of view. Poverty, unemployment, and alienation from the system are not simply private burdens. To the extent that the "semi-public" vocational education system acts to reinforce the exclusion of minorities from the market

for skilled workers, it imposes social costs that act to offset, and may even outweigh, its benefits. What is required is a counter pressure against not simply racism, but against tendencies toward exclusivity and elitism which, even if color blind, produce a discriminatory result. The vocational education system must have as a goal the countering of its tendency to reinforce patterns of inequality.

Public education cannot accept sole responsibility for equal educational outcomes; there are too many variables that are beyond the control of the schools. What public education can do is assure that public resources are allocated in a manner which does not intentionally or unintentionally discriminate against young people with racial or other characteristics different from the majority, or traditional, beneficiaries.

The Council notes that the State Plan already acknowledges that the long term unemployed do not have the job skills increasingly required by the changing structure of Massachusetts' industries. Both industry and the disadvantaged population will suffer if vocational education fails properly to equip those who can be equipped with suitable skills, and if vocational education simply becomes a meaningless experience that passes the student on but not up. The Council now recommends the next step, which is quantitative goals for disadvantaged Black, Hispanic and other linguistic minority youth. This recommendation is based on three considerations:

First, a good faith effort to achieve equity in the use of resources requires quantitative measures of status and goals, and these will necessarily be related to the proportion of minorities in the area served;

Second, meeting quantitative targets can be no more than an intermediate goal; the ultimate test of success is quantity and quality of job placement, compared, if possible, to a control group that does not take part in the program but which otherwise exhibits similar characteristics.

Third, it would be appropriate for the State Plan to offer data which compares enrollments of priority populations to the proportion of those populations in

the general population, if only to let the comparison speak for itself in raising questions that ought to be the subject of local, and possibly state, concern. We realize that people of good will may differ on the interpretation of such data and on what should be done in light of what they reveal. Our hope is that these data will stimulate a dialogue at the local level between persons of good will, so that a consensus at the level of action can be achieved.

#### E. Special Education

The Department of Education's continuing commitment to the provision of appropriate, comprehensive vocational education to all handicapped persons, and its forward-looking approach to meeting this commitment via the utilization of joint funding, are to be highly commended. The Joint Occupational Education/Special Education Project seeks to expand occupational education opportunities for secondary school age youth in occupational education programs operated with Chapter 74 funds, through collaborative planning and program development between occupational education and special education personnel at the local level. The Project also coordinates the management of federal funds available under P.L.s 94-142 and 94-482.

The Council has expressed increasing concern about the disproportionate representation of special needs youth in regional vocational schools, and the Department, itself, has acknowledged that it is impossible to service all of the vocational needs of special needs youth in the regional vocational schools. Parents increasingly are rejecting education plans which do not call for the delivery of vocational education services at the comprehensive high schools. For both of these reasons, the Department and this Council concur that vocational education programs being offered in the comprehensive high schools will have to be increased.

#### F. Sex Equity

A simple analysis of enrollments demonstrates that, although progress has been made, vocational education in Massachusetts still mirrors the single-sex patterns evident nationwide. Female enrollments dominate health

occupations (88%), occupational home economics (79%), consumer and homemaking (75%) and office occupations (72%). Moreover, certain instructional programs within these broad occupational clusters are even more strikingly female-dominated, e.g. dental assisting (100%), cosmetology (99%), child development and guidance (98%), housing and home furnishings (96%), secretarial and related (94%). On the other hand, males continue to make up a disproportionate share of enrollments in trade and industrial (86%) and technical programs (84%). Within these categories, for example, males constitute 95% of enrollments in auto mechanics, 97% in electricity, 97% in machine shop, 94% in carpentry, 99% in plumbing, 97% in masonry, 95% in electrical technology and 98% in automotive technology.

This pattern in program enrollments is also seen in school enrollments. Although females are at least 50% of the school age population in Massachusetts, an analysis of total enrollment in forty-eight "selective" secondary vocational-technical schools in the State reveals that only 27% is female (up from 25% in 1977). But this average figure is quite misleading, since there are twenty-two such schools with female enrollments of less than 25%, and two with female enrollments of greater than 80%.

The point of this analysis is not to accuse the State Board or the Division of indifference, but to illustrate what we all know--that a lot more work needs to be done. The Council notes that the Division has set specific goals to address the need to bring about sex equity in vocational education, as outlined in the current Three Year State Plan for Vocational Education, and we support those goals:

A strong effort needs to be made to get more females into nontraditional, skills-intensive programs leading to career ladders in primary labor markets, and this attempt must begin with attitude modifications, even before the secondary level. The Council reiterates its position that it is not enough for the Division to say that enrollments are increasing. For the data to be meaningful, the Board of Education needs breakdowns of enrollments by sex and by six-digit OE codes. The data base now being compiled by the Division for the Vocational Education Data System (VEDS) should provide such information, reliably, by the end of FY 1981.

#### G. Career Education Incentive Act

The year 1980 was the first for the availability of federal funding under the Career Education Incentive Act (P.L.95-207), to implement the State Plan for Career Education, which had been approved by the Board of Education in May of 1978.

The Advisory Council commends the Department of Education for its equitable and efficient handling of P.L. 95-207 funds, despite the late availability of these funds in both FY 1979 and 1980. The Council also is pleased to note the substantial commitment of the Department to the implementation of career education in the form of human resources and facilities.

#### H. Boston

In its FY 1979 Annual Report, the Council recommended to the State Commissioner of Education that a program and fiscal audit of vocational education be carried out in the City of Boston.

In March, 1980, at the request of the Commissioner of Education, the Cambridge office of American Institutes for Research (AIR) conducted a program audit of occupational education in the Boston Public Schools, for fiscal years 1979 and 1980. In addition, the State Department of Education's Bureau of External Audit conducted a fiscal audit of programs funded in fiscal years 1977 and 1978. AIR issued a preliminary report of program audit findings, together with recommendations for change, in September, 1980. No findings as to the fiscal audit had been released by December 31, 1980.

The preliminary program audit report concluded flatly that the Boston Public Schools were in noncompliance with federal and state laws related to access, facilities, equipment, curriculum, safety, accountability and management.

The Council had been optimistic with the opening of the \$35 million Hubert H. Humphrey Occupational Resource Center in September, 1980. Highly touted as the driving force behind Boston's new commitment to quality vocational education, the ORC had been ten years in the making but was finally open (if not

fully operational), offering fifty programs in nine occupational clusters, with personalized, competency-based curricula. A series of financial blows to the school system soon diminished the Council's optimism and we now have serious concerns that some of the best programs scheduled to be opened at the ORC in 1980-81 will be drastically curtailed, or destroyed, by the budget squeeze on education in general and Boston in particular.

It is important to note that, as it has in the past, the Council continues to see countless examples of individual dedication to the goal of providing quality vocational education to Boston's young people and adults.

#### I. Professional Development

In the area of professional development, the Department has continued to expand its focus, evidencing its awareness of the need both to train and retrain teachers to keep pace with the rapidly changing needs of the vocational education consumers of the 1980's. The Department also has addressed the needs of teachers displaced from the classroom due to declining enrollments.

Five projects were funded by the Division of Occupational Education for FY 80 and 81 and more RFPs will be issued. The attempt of the Department to keep abreast and ahead of the ongoing need for professional development is to be highly commended. The movement of the Department in this direction responds to a long-standing concern of this Council with the quality of vocational teacher training. It is vital that minority candidates move into positions as vocational instructors, both for their own sake, and to serve as role models for the many minority students the vocational education system of this Commonwealth serves.

#### J. Local Advisory Councils

In the Massachusetts Annual and Five-Year State Plan and subsequent Annual Plans, the Board of Education certified that all eligible applicants, in order to access funds under Public Law 94-482, would be required to establish Local Advisory Councils to:

1. review manpower demand;
2. suggest vocational programs to meet local manpower demand as identified.

Membership on these councils includes representatives of the general public, business, industry and organized labor. The requirements specify "an appropriate representation" of racial, ethnic, and linguistic minorities and handicapped persons in the programs, schools, communities or regions which the local advisory council serves, yet in research undertaken by this Council, a marked absence of Hispanics was noted in the membership of local councils in Boston, Springfield and Worcester, all of which communities have substantial Hispanic populations.

We do not know how many local advisory councils for P.L. 94-482 funded programs exist in Massachusetts. Moreover we do not believe the Division knows for certain. But on page 221 of the current Three-Year Plan for Vocational Education, there is an analysis of local advisory council membership composition and representation which indicates that, in the six educational regions, there are a total of 2,243 local advisory council members reported. The Division summarizes the membership of local advisory councils according to type of representation, including handicapped, racial and linguistic minorities and females, but offers no suggestions as to which groups need to be strengthened.

#### K. Postsecondary Education

The Commonwealth of Massachusetts, and the Department of Education, as well as the State Advisory Council on Vocational Technical Education, have tended to view vocational education as being primarily within the province of the secondary education system. This view is not held by all states and, in fact, overlooks the valuable resource of community colleges and other post-secondary institutions. If the Commonwealth is moving, as well as it seems to be, in the direction of an increasingly service and high skills-oriented work force, it makes sense for more federal occupational education monies to be put into post-secondary programs. The introduction of a merit factor, in addition to "body counts", might be one avenue for consideration.

If it is assumed that the more sophisticated technical occupations require comprehensive education at the secondary level, with specific vocational skills training concentrated at the postsecondary level, then secondary schools have a responsibility to produce graduates who have solid academic skills, as well as generalized occupational skills. Students seeking access to technical and service occupations requiring post-secondary training need to be better prepared at the secondary level than they are now. Postsecondary education has tended to become a rerun of secondary education, with heavy emphasis on "basics" and on remediation. But delivering a program at a community college, or other postsecondary program, should be qualitatively different from delivering the same program to the same people in a secondary environment.

In May of 1977, the Board of Education and the Massachusetts Board of Regional Community Colleges (MBRCC) issued a joint policy statement on post-secondary occupational education in which they committed themselves to increasing the access to occupational education (and hence, the labor market) of those individuals and groups previously underserved by post-secondary institutions. After three years (in May, 1980), an evaluation study was undertaken by the Department of Educational affairs of the MBRCC to review progress made in achieving the objectives of that policy with regard to federally funded vocational education grants awarded to Massachusetts Community Colleges by the Department of Education.

No one can quarrel with the significance of the intent of the policy, or with the accomplishments it did achieve, but making it operational proved difficult. The statement contains no procedures for pursuing the policy; there are no provisions for joint decision-making; the primary mode of implementing Department of Education policy in the Community College system has been through the creation of new programs--a strategy which cannot continue indefinitely; the Board of Education committed only federal resources to the Joint Policy. It appears that the scope of the policy was too global and too general.

With the dissolution of the MBRCC and the Board of Regents taking over, the time is opportune for the policy to be revamped and made more structured, including the establishment of a formal process for creating, developing, funding and implementing new degree programs.

It is clear that the Department is desirous of making something good of the Joint Policy. In the post-secondary sector there already exists a system to meet the pressing manpower needs of the Commonwealth for sophisticated training, without subverting the broader, more comprehensive educational process at the secondary level. If the State wants to utilize the Community College system, realistic cost factors must be taken into account. Given the kind of training the State wants to do, relative to sophisticated job areas, the existing Community College system is a valuable resource to be tapped.

#### L. Employment and Training Needs of the Commonwealth

During 1980, Massachusetts made significant progress toward the goal of linking educational and employment and training resources together for the purpose of addressing the State's needs for growing numbers of skilled workers, particularly in the rapidly growing high technology field. In so doing, the State acknowledged that the economic development issue is one that involves a partnership between the public and private sectors, and that the solving of economic development problems will require a joint effort on the parts of government, education, labor, and business and industry working together to develop and broaden the Commonwealth's skilled and professional work force to meet the emerging and expanding needs of business and industry.

The Bay State Project, which emerged in 1980 as the State's major new initiative in linking vocational educational and employment and training programs with the economic development needs of private industry, has served to focus attention once again on the urgent need for improving the collection and dissemination of accurate data on both the demand for skilled labor and the supply of trained workers. In past reports, the Advisory Council repeatedly has called attention to

this need, particularly in terms of improving the capability of planning for future vocational and employment and training programs.

In the past year, the Massachusetts Occupational Information Coordinating Committee, in cooperation with the Executive Office of Economic Affairs and Northeastern University, has made significant progress, not only in the coordination of efforts to produce better supply and demand labor market data, but also in the area of disseminating these data in a format usable by program planners and administrators.

The FY 1980 Annual Report of the Massachusetts State Employment and Training Council (SETC) presents a comprehensive review of employment and training activities conducted throughout the Commonwealth with federal, state and local funds amounting to \$600 million. These activities, which have included on-the-job and institutional skills training, vocational education, work experience, job development and placement, subsidized employment, and related supportive services, have been administered by a wide variety of public and private agencies and institutions. These organizations include community colleges, regional and local vocational-technical schools, vocational rehabilitation programs, public and private universities and colleges, state agencies such as the Division of Employment Security, prime sponsors under the Comprehensive Employment and Training Act, community-based organizations, labor unions, and various advocacy groups. Together and collectively, these agencies and institutions make up a coordinated and comprehensive employment and training system with the common goal of meeting the needs of employers in the Commonwealth and helping the State's citizens to become productive members of the labor force.

The Advisory Council is pleased to note that the efforts of the SETC and the Department of Education to coordinate employment and training and vocational education activities, which had been gaining momentum during the two previous years, continued during 1980, particularly in the implementation of activities under the State's Youth Action Plan. The CETA office within the Department of Education's Division of Occupational Education has continued to provide the main

liaison point between the State's vocational education and employment and training agencies, but the cooperation and coordination between and among the systems go far beyond this formal interagency link, as is evidenced by the active participation of the members of the Board of Education and the Advisory Council staff in SETC activities, and the joint planning efforts by SETC and Department of Education staff under the umbrella of the Massachusetts Occupational Information Coordinating Committee.

During 1980, the Division of Occupational Education's CETA office updated and expanded its Index of Educational Resources applied toward the Youth Action Plan which had first been compiled in 1979. The FY 1980 Index shows that an additional \$10 million in Federal funds (over the FY 1979 funding level of \$40 million) are now being applied to the implementation of youth programs, that shifts have been made in funding priorities by the Department of Education for FY 1980, and that there have been significant gains in interdivisional and interagency collaboration and cooperation during the past twelve months. The Council is particularly pleased to note that the Department of Education and the Department of Manpower Development have begun publishing a newsletter, LINKAGES, to facilitate the dialogue that will lead to collaborative action.

#### M. Reauthorization of the Vocational Education Act

The federal Vocational Education Act (VEA) expires September 30, 1982. The U.S. Department of Education and the Congress have begun a process of reexamining both the broad issues involved in federal support for vocational education and the VEA's existing provisions. State Advisory Councils on Vocational Education are also examining the issues.

Vocational education is and should remain primarily a local\* option, subject to local control based on local needs. If it is to receive federal support, however, it must be able to demonstrate that it is helping to solve

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\* *The term "local" denotes a local education agency.*

national problems of poverty, unemployment and under-employment; lack of equitable access to training and jobs; unequal educational opportunity; chronic inflation, and declining productivity. Therefore, the role of the federal government should be to provide incentives for local and state vocational educational agencies to go beyond traditional courses and delivery systems in addressing national priorities.

The following goals should undergird the federal role in vocational education: (a) eliminating discrimination because of race, sex, handicap or limited English language proficiency; (b) reducing interstate and intrastate disparities in financial ability to support quality education; (c) protecting the rights of state and local governments, and public and private institutions, in the areas of educational policy and administration of programs; (d) meeting industrial modernization needs; and (e) providing the skilled labor force required to mount a major defensive effort in a national emergency. In pursuing these goals, the Congress should resist the tendency to design a piece of legislation that merely incorporates a series of compromises reflecting the self-interest of different constituent groups; rather, the new legislation should be the end-product of a thoughtful assessment of the nation's needs, and a logically developed process that will enable vocational education to make its maximum contribution in meeting those needs.

#### N. Recommendations

The following recommendations are grouped by subject for convenience of discussion; the order of listing is not intended to suggest priorities.

#### ● Planning (Chapter IA)

1. That the Board of Education review and revise the State Plan for Vocational Education, to reflect what the future for vocational education looks like now, in light of the effects of Proposition 2-1/2.

2. That the Division of Occupational Education and the Advisory Council on Vocational-Technical Education hold a series of conferences with local education agencies and local advisory councils to discuss long-range planning for vocational education through the 1980's.

● Evaluation (Chapter IB & C)

3. That the Division of Occupational Education develop an evaluation model for federally funded programs, for use by local education agencies, to:

a. assess the success of program results in terms of the goals and objectives set forth in the State Plan;

b. assess the relevancy of the LEA's range of offerings to labor market needs and to student needs; and

c. incorporate evaluation results into the planning process.

4. That the Division of Occupation Education develop a separate Accountability Report, in addition to the compliance document, which goes far beyond the compliance reporting required by P.L. 94-482, and is understandable to the general public.

● Access (Chapter ID, E, F)

5. That the Board of Education develop a policy under which significant incentives are offered to those school systems improving their enrollment of minorities in technical skills training programs and administrative and teaching positions.

6. That the State Plan suggest enrollment targets for disadvantaged Black youth based on their numeric representation in the geographic district being served.
7. That the State Plan suggest enrollment targets for disadvantaged Hispanic and other linguistic minority youth based on their numeric representation in the geographic district being served.
8. That the State Plan clearly identify dollar amounts to be targeted to disadvantaged Black youth.
9. That the State Plan clearly identify dollar amounts to be targeted to disadvantaged Hispanic and other linguistic minority youth.
10. That instructions for completing the Local Plan stress the need for access to all occupations for disadvantaged Black youth.
11. That the term "disadvantaged Black youth" be used consistently, where appropriate, throughout the State Plan; that the term "minorities" be expanded to include "minorities of both sexes"; and that the term "women" be expanded to include "women of all ethnic groups".
12. That the Department of Education take steps to ensure appropriate representation of Blacks, Hispanics and other linguistic minority groups, and women of all ethnic groups, at every level of the planning process for vocational education.
13. That vocational program offerings for special needs students at comprehensive high schools be increased through utilization of monies available through joint funding.
14. That community based organizations receiving support from vocational education monies be encouraged to utilize space in local education agencies, where necessary equipment is already in place.

15. That the Division of Occupational Education compile and disseminate, at least annually, detailed data on sex equity in vocational programs, including information on teachers and administrators.

16. That the Division of Occupational Education closely monitor enrollments in technical programs to determine if female enrollment is increasing.

17. That the Board of Education place even greater emphasis on the need for recruitment, counseling and support service projects designed to overcome sex bias and stereotyping in occupational education.

- Boston (Chapter I, H)

18. That the Division of Occupational Education conduct a survey of disadvantaged Black and Hispanic youth in Boston to determine their attitudes toward vocational education and what motivates them to choose the training programs they do elect.

- Professional Development (Chapter I, I)

19. That the Board of Education continue to support, at adequate levels, the current efforts to recruit and train bilingual and Black vocational instructors.

- Local Advisory Councils (Chapter I, J)

20. That the Division of Occupational Education, with the assistance of the State Advisory Council, provide greater technical assistance to local advisory councils in interpreting their role in the vocational education delivery system in the Commonwealth.



I. Planning, Evaluation and Progress Toward State Plan Goals

A. Analysis of the Current State Plan

Title XII of the Education Amendments of 1978 (P.L. 95-561) revised a number of requirements in the General Education Provisions Act (GEPA). Section 430(a) of the amended GEPA substituted a Three-Year State Plan for the Annual Program Plan required under Section 108 of P.L. 94-482. The first Three-Year State Plan covers the period from July 1, 1979 through June 30, 1982. Since the Massachusetts Annual Plan for FY 1980 had already been submitted and approved by the time the more liberal requirement became effective, the Commonwealth's first Three-Year Plan amends the FY 1980 Annual Program Plan and also covers FY 1981 and FY 1982. This will conclude the five-year cycle called for in P.L. 94-482 and it is not yet known whether the new "long-range" plan will cover five years or six.

The Council is satisfied that the Division of Occupational Education (the Division) has made a good-faith effort to address most of the concerns and issues raised in the Council's FY 1979 Report and throughout the FY 1980 planning cycle. While there is still room for improvement, particularly in the areas of specific goals and criteria for evaluation, the Council recognizes continuing movement toward comprehensive planning. Some noteworthy changes are cited in the following paragraphs.

1. New formulas were developed for allocating P.L. 94-482 funds, by category, among eligible recipients. Designed to more accurately reflect concentrations of low income populations and local ability to provide resources, the formulas are effective for fiscal years 1981 and 1982.

Although the old formula had targeted federal money to economically disadvantaged areas, a number of issues were raised by local and federal sources, as well as by the Council. Chief among these issues were: 1) the use of median family income to determine concentration of low-income families was not adequate, primarily because it was based on 1970 census data; 2) the allocation formula did not recognize relative program costs; 3) the allocation formula did not recognize that special populations are unevenly distributed across the Commonwealth; and 4) some local education agencies (LEAs) received allocations for certain subparts of less than \$1,000.

The most significant changes in the new formulas are:

- the addition of recent AFDC data for measurement of concentration of low income individuals;
- the measurement of eligible recipient needs through indices which compare the data of eligible recipients directly to statewide averages;
- the recognition of relative program costs by additional or weighted counting of pupils enrolled in multi-year, intensive, job skills training programs;
- the recognition of differences in the distribution of underserved groups through the utilization of separate enrollment information for handicapped, disadvantaged, limited English proficient, postsecondary and adult, and dropout student populations, and;
- the establishment of minimum allocations for most funding categories to assure that funded programs are large enough to have measurable impact.

2. School districts may now use up to 50% of the Balance of Subpart 2 funds available to them under P.L. 94-482, to maintain programs previously funded with federal dollars, or to replace obsolete or broken equipment. Federal funds may not be used to supplant local expenditures, and there is a \$100,000 limit on this option, but it should help local education agencies to cope with economic circumstances beyond their control.

3. The Plan now contains language specific to the occupational education needs of minority youth, which is a step forward. To the Council's knowledge, however, the "procedures to increase minority enrollments," first suggested in the FY 1980 Plan, and reiterated in the current Three-Year Plan (pp. 36-37), have yet to be fully implemented. This is not to say that the Division is doing nothing, for the 1980-1982 Plan specifically sets priorities among eligible applicants, programs and populations, including minorities. But the Division needs more effective strategies for increasing enrollments of minorities.

4. The Council takes special note of a major change in the local planning process, which speaks directly to our long-standing concern for better integration of state and local planning. For the first time, local education agencies seeking P.L. 94-482 funds are required to develop a Local Plan (Form BPRE-3), which includes a needs assessment for their local areas. The Council commends the Division for developing the Local Plan process and looks to its continued refinement.

Page one of the Local Plan (see Appendix C) speaks to the need for coordination. All of the parties concerned with vocational education are asked to certify their participation in the planning process. The Council realizes that merely signing-off on a document does not guarantee participation but, nevertheless, this is a significant movement toward identifying the agencies that must be involved if comprehensive planning is to become a reality. The Council notes in particular the involvement of both the local Advisory Councils and the local CETA prime sponsors, as well as the fact that several signatures are now required by the federal legislation; e.g., that of the Title IX/Chapter 622 Coordinator, and that of the Local Occupational Education Coordinator.

The Planning Booklet addresses the Council's concern that local Advisory Councils be actively involved in planning and have representatives from a cross-section of interested parties. The Local Plan must include a detailed break-down of the local Council's membership, and the Chairperson must certify that a local Council was established for the development of the Plan as well as for the development of all local applications. The Council also notes that the Division suggests including a student representative, and a community representative, excellent additions not required by the federal statute.

The Local Plan requires each applicant for federal vocational education funds to assess student needs, labor market needs, and local resources. For each of the priority populations identified in P.L.94-482, the applicant must answer two basic questions:

1. Are needs adequately addressed by current programs?
2. If not, is there a need to increase enrollments and/or support services?

The Council commends the Division for this effort, the results of which are summarized in Section 1.1 of the State Plan for FY 1981 and 1982 (see Appendix D). The summary data are rough -- even illogical -- in places, but that is to be expected the first time around. The Council has three general observations, on the results. The first is that, when examining these data, it is important to remember that the percentages apply to the number of local plans submitted, rather than to the total number of school districts. The second is that there seems to be little consistency across regions as to needs, which obviously makes it difficult for the Division to plan at a statewide level. Our third observation is that, with the exception of males/females in "traditional" programs, most applicants see a greater need for support services than for increased enrollments in skill training programs. We are not certain what this means but it tends to buttress the findings elsewhere in this Report that priority populations are clustered in projects and programs in occupational areas not directly related to employment opportunities in primary labor markets (see Section IC).

Only one Local Plan (and thus one signature from each interested party) is required for all the P.L. 94-482 grant applications an LEA might submit, whereas in the past, each application had to be signed. Plans are analyzed by regional Department of Education Office staff, who offer technical assistance. The Local Plan requires LEAs to refer to source documents such as the Governor's Youth Action Plan and the Board of Education's Policy on Occupational Education. In summary, the Local Plan seems to be an effective instructional tool for LEAs as they grapple with declining resources and increasing demands for coordination of local, state and federal programs.

5. The State Plan uses two approaches to incorporate labor market information in the vocational education planning process: 1) an analysis of statewide demand and supply of labor related to vocational education; and 2) updated employment information for twelve sub-state areas. The data and brief analysis given to LEAs provide the groundwork for assessing the implications of local economic

conditions for vocational education planning. The labor market information was provided through the cooperative effort of the Division of Occupational Education and the Department of Manpower Development, and the Council recognizes the great strides made in this critical function over the last four years. The Council looks forward to continued improvement of the State's planning capability, so that eventually changes in program funding levels can be shown to be directly related to changes in employment demand.

6. In its FY 1978 Report, the Council expressed concern over the apparent ineligibility of community-based organizations (CBOs) for federal vocational education funds. In 1979 the Division sought and received clarification on this matter from the U.S. Office of Education. In 1980 the Board issued a policy statement, stating that CBOs possess some unique attributes not readily available in sufficient quality or quantity within major urban school districts. CBOs are particularly valuable in the area of supplementary education services, such as remedial education, guidance and counseling services, dropout prevention and outreach activities. The Council is pleased to note the Board's policy, which has been included in the State Plan, together with specific amounts allocated for direct contracting with CBOs.

7. The FY 1981 and 1982 State Plan contains statements on evaluation (discussed in Section IB of this Report) and on proposed research and program improvement activities. Both statements are positive additions to the State Plan and, in particular, the Council is pleased to note the creation of the Bureau of Planning, Research and Evaluation within the Division of Occupational Education, and the inclusion of its mission in the State Plan. The Council has wondered for some time now what was being accomplished by way of "research" with the substantial amounts projected in the State Plan for that purposes (e.g., \$300,000 in FY 1979; \$300,000 in FY 1980; \$400,000 in FY 1981). The Council has a research agenda of its own and would be happy to collaborate with the Division on topics of mutual interest.

8. The grant award process has been simplified in a number of ways:

- LEAs are required to file a local plan (discussed in item 4 above) delineating their overall needs and how they intend to utilize all funding sources, including local taxes, state aid and federal funds. By completing

this document, local education agencies will have eliminated 50% of the narrative material previously required in their applications for Public Law 94-482 funds. This is a considerable reduction of time spent in writing applications, as well as a reduction of paper work.

- For the first time, each local education agency is required to file a single application for all Public Law 94-482 allocation funds. Previously, the number of separate applications from school districts ranged from 4 to 35. With the design of a single application process there will no longer be a need for multiple grant awards to school districts for each source of P.L. 94-482 funds. If the Board approves all or part of a single application from one local education agency, there will be one grant letter announcing the award for all of the sources of P.L. 94-482 funds approved by the Board.
  - The Quarterly Progress Report (QPR) system, initiated by the Division two years ago in order to monitor the flow of federal funds, has been simplified. The QPRs are now reviewed only at the regional level, rather than in both regional and central offices, which should expedite the release of quarterly payments to LEAs.
  - Each school district now files a single Statement of Assurances for all state and federal funds.
9. The Board of Education has voted to actively seek a solution to the problem of prior commitments to pay for construction costs of vocational education facilities.
10. The Plan directs some P.L.94-482 funds toward industry-specific needs, including the needs of the Commonwealth's high technology companies.
11. Collaborative service delivery for handicapped persons is continued and enhanced through funding provided jointly by the Division of Occupational Education and the Division of Special Education; there is a call for expansion of occupational education opportunities for secondary students with special needs.

### Conclusions

The Massachusetts Advisory Council recognizes an increased spirit of cooperation which has opened up the planning process, as required by P.L.94-482. The willingness of the Division of Occupational Education to listen to diverse

points of view, and to incorporate suggestions in the State Plan, has produced a document that is potentially more useful to local education agencies than had been the case before 1978. We say "potentially," because the State Plan needs to be more widely distributed and discussed if it is to have maximum impact. Although our evidence is anecdotal, the Council believes that few local school committees or administrators are really familiar with the contents of the State Plan. And in our judgement, the document sent to Washington does not adequately describe what is actually happening by way of vocational education services in Massachusetts -- with the possible exception of dollar allocations. Furthermore, the lack of enthusiasm for state-level planning is unlikely to change in the absence of significantly increased state and federal financial aid.

The blunt truth is that federal regulations and technical requirements still shape the form and even the content of the state plans mandated under P. L. 94-482. And those regulations do not operate to encourage bold creativity, much as the Congress might wish it were otherwise. We do not blame the federal government for the lack of comprehensive planning for vocational education in the states. It is fair to say, however, that excessive concern with federal requirements will eventually chill the imagination of even the strongest administrator -- and this is what has happened. Rather than striving to write a comprehensive, readable plan in which needs assessment is fully integrated with goals, activities and allocation of resources, state agencies nation-wide have tended to assemble a hodgepodge of policy statements, tables of unanalyzed data, and narrative descriptions of compliance activities.

The Council believes that the Division of Occupational Education is moving in the right direction by emphasizing local planning and providing technical assistance in planning to LEAs. We reiterate our long-held conviction, however, that there also must be a system of statewide planning, which produces a coherent, detailed statement of goals and objectives emanating from an overall planning philosophy. Not a philosophy from Washington, but one which reflects the Commonwealth's economic development needs, and the educational needs of its citizens.

Statewide planning for vocational education over the next five years will have to take into account the impact of "Proposition 2-1/2," a tax-cutting measure passed by Massachusetts voters on November 4, 1980 and due to take effect on July 1, 1981. The cuts in school budgets necessitated by Proposition 2-1/2-related losses in local tax revenue will affect everything from teachers' jobs to hand tools and supplies for students. The Board and Commissioner of Education have taken the lead in working closely with educators and municipal officials to map a rational response to the voters' mandate, while trying to minimize cuts that will seriously erode the quality of public education. At the time of this writing, however, no one has the hard data necessary to show convincingly what effect Proposition 2-1/2 will have on vocational education, and no coherent plan exists for dealing with what amounts to a fiscal crisis for most school committees. The Council believes the State Plan for Vocational Education is the logical vehicle for providing information, data and illustrations of just what the impact of Proposition 2-1/2 will be on vocational education, together with a systematic approach to dealing with the new realities presented by this tax reduction law.

#### Recommendations

1. That the Board of Education review and revise the State Plan for Vocational Education, to reflect what the future for vocational education looks like now, in light of the effects of Proposition 2-1/2.
2. That the Division of Occupational Education and the Advisory Council on Vocational-Technical Education hold a series of conferences, with local education agencies and local advisory councils, to discuss long-range planning for vocational education through the 1980s.

B. A Review of the Evaluation by the State of Education Programs Operated by Local Education Agencies and other Recipients of Federal Funds

● Council Position on Evaluation

In order to avoid duplication of effort, and because of very limited staff resources, the Advisory Council has taken the position that its primary role in carrying out its evaluation responsibilities should be to work cooperatively with the Division of Occupational Education for the purpose of developing an overall plan to evaluate vocational education programs within the Commonwealth which are supported totally or in part by P.L.94-482 funds.

This supportive role does not preclude the Advisory Council from conducting independent program evaluations and site visits from time to time, as staff resources permit, but it does emphasize the Council's position that the interests of the recipients of vocational education services can be served most effectively by the Council and the Division working closely together to ensure that the evaluation requirements of P.L.94-482 are carried out. This joint effort includes the active participation by Council members and staff in the development of instruments and procedures for the collection of statistical data, and the use of these data for planning purposes. It also includes the participation of Council members and staff as adjunct members of evaluation teams in a select number of site visits conducted by Division of Occupational Education staff. By such participation, the Council is enabled to fulfill its responsibilities for assisting the State Board in developing plans for evaluations, and for monitoring these evaluations.

During 1979-80, Council members and/or staff visited the following vocational schools: Shawsheen Valley Regional Technical-Vocational High School, Putnam Vocational-Technical High School, Westfield Vocational High School, Worcester Vocational-Technical High School, Chicopee Comprehensive High School, Diman Regional Vocational-Technical High School, B.M.C. Durfee High School, Norfolk County Agricultural High School, Assabet Valley Regional Vocational-Technical High School and the Hubert H. Humphrey Occupational Resource Center. In addition, Council members and/or staff participated as observers in program evaluations conducted by the Division of Occupational Education, at the following sites:

Assabet Valley Regional Vocational-Technical High School, Framingham North High School, and a program audit of the entire vocational education delivery system in Boston.

At all field sites, Council members talked with staff and students, and observational data were collected on physical and attitudinal conditions. The findings from field site visits are incorporated throughout this Report. These site visits are a valuable mechanism for assessing existing vocational programs, and for giving Council members a sense of what is actually going on in the schools.

Pursuant to the position that, although the Council should conduct independent evaluations, it can contribute more by monitoring the State's evaluation process, the Council has drafted a site visit instrument, which will be pilot-tested in 1980-81 as Council members participate in site visits conducted by the Division. The Division has been open and cooperative in inviting Council members to participate in evaluation activities.

#### ● The State's Evaluation Process

The Council is pleased to note a description in the State Plan for 1981-82 of plans for evaluation over the next three years. The newly created Bureau of Planning, Research, and Evaluation has stated its intention to coordinate with the Bureau of Financial Management and the Bureau of Program Services, in conducting evaluations in each local education agency receiving federal or state funds for vocational education. According to the State Plan, pp. 110-111, the proposed evaluation system will include four major activities:

1. A Program Administrative Review (PR): an evaluation of compliance with regulations.
2. A Program Assessment in Vocational Education (PA): an on-site evaluation of instructional program efficiency, conducted by an external evaluation team composed of persons from outside the local education agency, including educators, business, industry, labor personnel, and former or current vocational education students.
3. A Desk Review and Field Audit (DR): a review of selected fiscal records, conducted by the Bureau of Financial Management.

4. A Follow-up of Students and Employers (FUSE): a survey of those students who have completed programs, and their employers, conducted by the local education agency.

A schedule was to have been introduced in October, 1980 to achieve the evaluation goals within a three-year timeline, 1981-1983. Local education agencies were to be divided into three sample groups within each region. By gathering administrative, occupational program, accounting, and/or student and employer follow-up information from any one of the three sample groups in any one year, the Division intends to make accurate estimates about how all of the regions and their LEAs stand on all areas of inquiry.

Beginning in Fiscal Year 1981, each local education agency within the State being assisted with funds under the Vocational Education Act, prepares an annual Local Plan. This Local Plan provides the Division with demographic data concerning membership in the local advisory council, source documentation used in developing the Plan, student needs by type/population, occupational skills training program needs by U.S.O.E. code, supportive program needs, program improvement needs, long and short-range planning narratives, plans for collaboration, and plans for the uses of federal funds to meet goals for the educational programs.

Applications for programs based on the needs established in the Local Plan are submitted annually for review and approval. Those applications which are approved form the sample groups within the evaluation cycle.

The results of these evaluations will be used to determine priorities for utilization of human and fiscal resources, to revise the Division of Occupational Education's Annual Plan, and to improve the quality and effectiveness of local planning efforts and programs. A summary of program evaluation conducted under the auspices of the

Bureau of Planning, Research and Evaluation will be included in the State's Annual Accountability Report submitted for that fiscal year. Finally, results of the evaluations will also be transmitted to this Council for use in developing our FY 1981 Annual Report.

The evaluation process described above is a sound beginning. The Council looks forward to the time when it can reach an understanding with the Division as to: 1) what questions need to be asked in order to know whether the goals set forth in the State Plan are being achieved; 2) how best to get answers to these questions; and 3) how to use the results of evaluation to re-define the goals and objectives of the State Plan.

The Council is convinced that the State knows how to evaluate vocational education programs. The Council has participated in on-site evaluations conducted by the regional offices of the Division of Occupational Education, and, although the regions are not equally strong in this regard, there is ample evidence that given enough staff and a sufficient amount of funds, the Division could move faster to develop standards and procedures under which all programs would be monitored effectively and the results reported in a standardized format. The fact is, however, that the regional offices do not have enough staff, nor do they have a budget sufficient to permit more than a sampling of programs in operation. As matters now stand, program experts for evaluation teams are drawn from schools other than the one being evaluated; some schools send three or four teachers several times each year and the sending schools are not compensated for the cost of substitutes.

Even with these constraints, however, the Division managed to monitor on-site 189 of the 725 P.L.94-482 programs funded for FY 1979. In addition, 312 Final Reports were filed by project directors and reviewed by Division staff.

There were 69 school districts whose vocational programs were evaluated through the Chapter 74 state monitoring process. Over 400 programs were evaluated in the 69 school districts. 42 school districts were monitored on-site; the remaining school districts filed self evaluations.

Comprehensive Chapter 74 Program Audits were conducted in nine school districts by evaluation teams consisting of state agency personnel and instructors and specialists in vocational education from institutions outside the school systems being evaluated.

In the absence of significantly increased resources, the State will have to rely more on LEAs to do their own evaluating, and the Council notes that the instructions for completing the application for federal funds (form BPRE-4) now include guidelines for developing a project evaluation plan. Our only criticisms of these excellent guidelines are: 1) they are too brief, and 2) they do not ask the evaluator to relate the project to State Plan goals and objectives.

#### Recommendation

That the Division of Occupational Education develop an evaluation model for federally funded programs, for use by local education agencies, to:

- a. assess the success of program results in terms of the goals and objectives set forth in the State Plan;
- b. assess the relevancy of the LEA's range of offerings to labor market needs and to student needs; and
- c. incorporate evaluation results into the planning process.

C. Progress Toward State Plan Goals

The Massachusetts Five-Year State Plan for Vocational Education, 1978-1982 established the following goals:

Goal I: Provide equal access to quality vocational education programs in occupational areas related to promising employment opportunities for a greater number of youths and adults especially those who are presently unserved or underserved.

Goal II: Improve the procedures for delivering vocational education in the Commonwealth of Massachusetts.

Goal III: Provide a comprehensive system of administration to manage personnel, facilities, materials, and fiscal resources and to organize the delivery system of vocational education in Massachusetts.

The Council has maintained consistently that these goals, and the objectives suggested in the Five-Year Plan for achieving them, were not specific enough to be of much operational value, either to the Division or to local education agencies. Goal I has proved to be singularly nettlesome, since it uses as a baseline data that were unreliable to begin with, makes enrollment projections without any apparent supporting rationale, does not specify what "increased enrollments" really means, (enrollments in programs, or courses?), and does not say how increased enrollments will be achieved. Moreover, now that the Division is making significant progress toward upgrading its data collection and processing capacity, the State is in the curious position of having goals that are too fuzzy to evaluate quantitatively with the analytical tools about to come on line. Since the U.S. Education Department has never objected, however, and since the most recent Three-Year Program Plan approved by Washington takes us to the end of the current long-range planning cycle, the Council will drop this issue -- at least until the Vocational Education Act is reauthorized.

What, then, can be said about movement toward long-range goals? If one takes a synoptic view of the State's accomplishments, there can be no doubt that significant

progress has been made: federal funds are now concentrated in areas of greatest need; there are more women, minorities, disadvantaged and handicapped students enrolled in vocational education; both state and local planning have improved; procedures for monitoring and auditing expenditures have been tightened up; the state school-aid formula has been amended to recognize differences in local resources (although we do not yet know whether this has been beneficial to vocational education); there is better coordination between public education and CETA, and between the secondary and postsecondary levels; the Department of Education's data processing ability has improved considerably; and vocational educators are at least more aware of the State's economic development needs. Additional achievements are noted in the Accountability Report for FY 1979 (Appendix B).

If, however, one tries to ask quite specific questions about such matters as who is being served in what programs, or students' post-graduation employment experiences, or the quality and relevancy of programs offered, or even the relationship between total enrollment changes and federal aid, Massachusetts (and most other states) still can provide only partial answers. As has been previously noted, the Division is making impressive progress in its data processing capability and, barring a dramatic cut in funding, by the end of 1981 should be able to produce valid, reliable numbers in a format such that the data will be informative to the Board of Education and others.

The Council has two additional observations to make with respect to setting enrollment goals. The first is that all managers and "planners" tend to be reluctant when asked to predict the outcomes of their projects. If pressed to do so, most become conservative in their estimates of what they can accomplish, because they bear the consequences of failure. State education agencies, no less than classroom teachers, prefer to define policy, establish general guidelines, and assess overall movement toward policy goals. This perfectly natural inclination is reinforced by the federal government's posture with respect to compliance. The Vocational Education Act, for example, is replete with matching requirements and prohibitions against supplanting. In times of a tax-payer revolt, declining school-age population and declining federal support of vocational education, there is little incentive to make audacious projections for which federal agencies (and citizens' monitoring groups) will hold one strictly accountable.

A second, major, problem is the difficulty the Council has in getting clean, reliable, valid and replicable data due, in part, to disparate definitions of target populations. The National Center for Education Statistics (NCES) remarked on this difficulty in recent testimony to the House of Representatives:

"The regulations implementing P.L. 94-482 define 'economic disadvantage' to include persons for whom:

1. Family income is at or below national poverty level;
2. Participant or parent(s) or guardian(s) of the participant is/are unemployed;
3. Participant or parent(s) of participant is/are receiving public assistance; or
4. Participant is institutionalized or under state guardianship.

While this definition may be legally sound it requires the knowledge of detailed household information to which the school cannot be expected to have access.

The problem is similar with respect to handicapped students. While handicapped secondary students are usually identifiable through the diagnostic procedures required by the Education of All Handicapped Children Act, postsecondary schools, which are not affected by P.L. 94-142, are unlikely to be able to identify handicapped individuals through the information available to the school."\*

In any event, the continued, slow evolution of the Vocational Education Data System, together with the NCES new program taxonomy, should eventually eliminate most

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\*Testimony of Rolf M. Wulfsberg, Assistant Administrator for Research and Analysis, NATIONAL CENTER FOR EDUCATION STATISTICS, before the subcommittee on elementary, secondary, and vocational education of the Committee on Education and Labor of the House of Representatives, September 17, 1980, p. 36.

of the technical problems involving duplications in enrollment counts that have always made such data suspect. The tables contained in Appendix A of this Report are provided for the sake of comparison with previous years, but, in the future, the Council looks forward to receiving accurate tabulations of the improved data reported to VEDS, when that system is fully operational, so that meaningful analysis and comparison will be possible.

Of greater interest to the Council in 1980 was a study done by the Division of Occupational Education, comparing actual enrollments in P.L. 94-482 funded vocational education projects with those proposed in grant applications. The scope of this study speaks directly to issues the Council has been raising for many years and we commend both the Board of Education, which ordered the study, and the Division.

The major questions this investigation sought to answer were:

- How did total actual enrollments compare with total projected enrollments?
- Was actual program access for female students similar to proposed access?
- Was enrollment performance related to the total grant award?
- When analyzed by educational region, did actual vs. projected enrollments differ?
- Did programs whose approved budgets were not primarily devoted to equipment purchases exhibit different total enrollment patterns than all grants examined together?

Tables VI, VII and VIII in Appendix A present the data resulting from the study, which can be summarized as follows:

#### Total Enrollments

- Of 677 projects, 42% were on target,\* 36% below, and 16% above.
- Of 240,851 planned students, projects proposing to enroll 125,647 (52%) were on target, those proposing to enroll 92,323 (38%) were below, and those proposing to enroll 22,881 (10%) were above.

#### Female Access

- Of 643 projects, 56% were on target, 25% below, and 19% above.
- Of 97,195 planned female students, projects proposing to enroll 76,403 females (79%) were on target, those proposing to enroll 9,591 females (10%) were below, and those proposing to enroll 11,201 females (11%) were above.

#### Minority Access

- Of 569 projects with some planned enrollment, 71% were below, 15% within, and 14% above target. The vast majority of projects which fell below projected minority enrollment fractions had small planned minority enrollments.
- Of 21,530 planned minority students, projects planning to enroll 8,645 (40%) were on target, those planning to enroll 8,532 (40%) were below, and those planning to enroll 4,353 (20%) were above.

#### Performance by Total Grant Award

- Of 677 projects, those whose grant award exceeded \$60,000 (24 projects or 4%) generally achieved lower portions of planned enrollments than all other projects.

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*\*Enrollments were considered "on target" if actual enrollments were 75% to 125% of planned.*

The Council is encouraged that the Division has undertaken this commendable study and we hope that it will be done annually. There are some problems but they can be solved. The most serious flaw we see in the study (and the Division is aware of it) lies with the way applicants for P.L.94-482 grants estimate the number of students their projects will serve. For example, a project might state that it is designed to "train 80 secondary students in the area of diesel mechanics, leading to job entry-level skills." Such a project is fairly easy to evaluate: did it enroll 80 students and did they, in fact, get entry-level jobs as diesel mechanics? But many projects provide occupational information or guidance or exploration opportunities, and the numbers projected for such projects are quite suspect. For example, one school district asked the Board last year for a mere \$6,700, for a project it said would serve 2,000 students in 3 different schools! When one looks at the proposal, however, it turns out that the money was used to pay for the part-time services of a para-professional to expand an existing career resource center. The Council affirms the value of career resource centers; the difficulty is that these 2,000 students, who might use the center, are added in with the 80 diesel mechanics when totalling "enrollments" supported with federal funds. When spread over 800-900 projects funded, the potential for distortion is significant, and "total enrollment" figures tell us nothing worthwhile.

The Division's study says that the federal projects surveyed in FY 1979 planned to enroll 240,851 students. Yet we know from Table I (Appendix A) that the total FY 1979 enrollment, including Chapter 74 and other programs was only 311,544. The Division has already taken steps to ensure that, in the future, applicants for federal funds are more realistic in their estimates of numbers to be served, and has put in place a uniform, statewide procedure for aggregating data for analysis. The enrollment data for FY 1980 should be much more reliable.

The Council, the Board and the Division were disturbed that so many grant recipients seem to be "under target," especially in programs designed to serve minorities. The Division has put a "remediation plan" system in operation that, in effect, requires grant recipients who are off target to say why and describe how they will remedy the problem. The remediation plan system seems quite rigorous and includes the possibility that project funding can be terminated; if it is carefully monitored, it should help the State direct federal money to where it can be used efficiently to further State Plan goals and implement Board Policy.

● Admissions Plans

State and federal laws not only prohibit public schools from discriminating against students on the basis of race, sex, and ethnic group, but also require schools to take certain steps to serve previously under-represented groups of students. Federal statutes and regulations under Title VI of the Civil Rights Act of 1964 (dealing with discrimination based on race), and under Title IX of the Education Amendments of 1972 (dealing with discrimination based on sex), are closely linked with Massachusetts State Law, Chapter 622 of the Acts of 1971, which prohibits discrimination based on race, color, sex, religion or national origin. Consistent with these federal and state laws, Section 8.10 of the Chapter 622 regulations requires selective secondary schools to admit qualified applicants of each sex, racial and ethnic group in numbers proportionate to the existence of members of such groups in the secondary school population of the geographic area served by the school.

Based on these specific state and federal laws, as well as the intent of P.L.94-482, the Massachusetts Department of Education has required, since 1977, that each of the fifty selective vocational and county agricultural schools in the State submit an "Admissions Plan." The aim of this plan is to compare enrollments with the racial, ethnic and sex distribution of students in the school's service area. An approved Admissions Plan is a prerequisite to state reimbursement and to a school's eligibility to receive federal vocational education funds.

Further, under the Federal Title IX regulations, public vocational schools are required to conduct self-evaluations of programs and policies affecting access by female and male students. A satisfactory Admissions Plan should demonstrate that the school is making appropriate modifications and implementing remedial steps, as required by Title IX.

During the second year of the admissions process, the Department requested that information on students who have been evaluated under Chapter 766 and found to have special needs be included. Both Chapter 766 and Section 504 of the Rehabilitation Act of 1973 prohibit schools from discriminating against those students with special needs, which includes admissions criteria that may have the effect of disproportionately excluding students of a particular handicap.

Additionally, the U.S. Education Department: Office for Civil Rights, "Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex and Handicap in Vocational Education Programs" adopted March 21, 1979, imposed new requirements on all state and local recipients of federal funds for vocational education training. Therefore, this year, considerable attention was focused on the schools' policies and procedures used to determine student eligibility for admission and the activities designed to address the under-representation in enrollment of particular groups of students.

The results of this process, from 1977-1979, was analyzed by the Division (see Appendix B, pp. 250-252), which concluded that, although there had been continued improvement in the recruitment and admissions practices and policies of the selective secondary vocational schools, much was left to be accomplished. Females continued to be concentrated in the traditional consumer/homemaking, and office occupations, and under-represented in the traditionally "male" programs. Students of limited English proficiency continued to be served in small numbers, and special needs students, especially in the higher prototypes, continued to face barriers to vocational education programs.

The Council agrees with the Division's conclusions, as well as with its recommendations, as follows:

1. There is a need to improve staff capabilities to provide technical assistance to school districts. This could be accomplished through in-service training, clarification of roles and responsibilities, identification of Division priorities and the development of new strategies to address school district needs.
2. Monitoring efforts must be continued in order to comply with the requirements mandated by the "Civil Rights Guidelines for Vocational Education Programs." All staff will need to understand the implications of these guidelines and how these guidelines affect their interaction with school districts.
3. The Admissions Update process must be reviewed in the context of the Civil Rights Guidelines. Issues such as admissions procedures for vocational education programs and validation of admissions criteria need to be addressed.

● Accountability Report

The FY 1979 Accountability Report -- the second required under P.L.94-482 -- is included in Appendix B. The Council reiterates its position that the Accountability Report should communicate to the general public the Division's analysis of progress being made toward achieving State Plan goals, and the implications for future planning of success and failures. While the second Report is an improvement over the first, it is still basically a compliance document, which apparently satisfies the U.S. Education Department, but which is of little use to those seeking to understand the rationale for policy changes and funding priorities.

Recommendation

That the Division of Occupation Education develop a separate Accountability Report, in addition to the compliance document, which goes far beyond the compliance reporting required by P.L.94-482 and is understandable to the general public.

- Analysis of the Distribution of Federal Funds

The total estimated Fiscal Year 1979 expenditure on vocational education in Massachusetts is \$260,880,428 of which \$15,774,452 are federal funds and \$245,105,976 state/local. Thus, federal support for vocational education amounts to roughly 6% of the total spent, or, putting it another way, for every federal dollar spent, the Commonwealth spends \$16.50. The Council is not surprised that state and local education agencies see a discrepancy between the federal monetary contribution to vocational education and federal paperwork requirements.

The distribution of P.L.94-482 funds during Fiscal Year 1979, detailed by subpart and eligible recipient, is contained in the Accountability Report, pp. 241-247 (see Appendix B). Although the accounting for expenditure of funds is extremely complex, because the time limit for use of federal funds bridges two fiscal years, it does appear that all the minimum setasides required by the federal legislation have been met. Of course, the requirement that federal funds be at least matched by state and local resources was also met.

D. Vocational Education Needs of Economically Disadvantaged Black and Hispanic Youth

● General

National evidence proves beyond doubt that unemployment falls hard on Black and Hispanic youth, 16-24 years old. In considering such evidence and its implications for vocational education, the Council assumes these propositions:

First, public education cannot accept sole responsibility for equal educational outcomes; there are too many variables that are beyond the control of the schools;

Second, what public education can do is assure that public resources are allocated in a manner that does not intentionally or unintentionally discriminate against young people with racial or other characteristics different from the majority, or traditional, beneficiaries;

Third, vocational education of superior quality has been operated in the meritocratic mold; the schools have been selective, admission has been by administrative discretion, and, if the status of students was below that of college-bound youth, it was above that of those in general programs;

Fourth, as a consequence, too many vocational programs have been characterized by their appropriateness for White, middle-class youth, often those who, by reason of family or cultural connections, already have had greater access to employment markets and specialized trades; and

Fifth, the consequence has been that skill training for those who need it most has received support in inverse proportion to need, and the pattern of inequality in job opportunities and in economic results has been reinforced.

We believe that the consequence has been neither equitable nor efficient from a social point of view. Poverty, unemployment, and alienation from the system are not simply private burdens. To the extent that the "semi"semi-public" vocational education system acts to reinforce the exclusion of minorities from the market for skilled workers, it imposes social costs that act to offset, and may even outweigh, its benefits. What is

required is a counter pressure against not simply racism, but against tendencies toward exclusivity and elitism which, even if color blind, produce a discriminatory result. The vocational education system must have as a goal the countering of its tendency to reinforce patterns of inequality.

The State Plan acknowledges that the long term unemployed do not have the job skills that the changing structure of Massachusetts' industries increasingly requires. Both industry and the disadvantaged population will suffer if vocational education fails properly to equip those who can be equipped with suitable skills, and if vocational education simply becomes a meaningless experience that passes the student on but not up.

● Black Youth

While the overall ratio of Black-to-White adult unemployment rates remains where it has been for many years, at about 2 to 1, the gap between Black-White youth unemployment rates has widened. In 1950, the unemployment rate for 16-19 year old Blacks was about 15 percent, compared to a 12 percent rate for Whites of the same age group; the rate for 20-24 year old Blacks was about 13 percent, compared to 7 percent for Whites of that age. Today, however, the unemployment rate for Black teenagers is conservatively estimated to lie in the range of 35-40 percent, while the rate for White teenagers fluctuates between 14 and 16 percent; Black youth 20-24 years old experience jobless rates of 17-20 percent, compared to 7-8 percent for Whites of the same age. Moreover, while unemployment trends among White youth tend to respond to economic cycles, joblessness among Black youth continues to drift upward even during periods of economic recovery.<sup>1</sup>

The Council readily concedes that there are statistical errors in the unemployment rate, and that there may well be some questionable assumptions built into the way it is computed. But Black unemployment and underemployment has been so pervasive for so long that such methodological problems are not the issue. If anything, when used as a sole criterion, the official unemployment rate probably underestimates the extent of Black joblessness, particularly when national data are disaggregated for state or sub-state areas, where sample sizes are quite small.

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<sup>1</sup>Employment and Training Report of the President, 1980.

Two additional measures of the labor force participation of youth help delineate the problem: 1) labor force participation rate, which is the proportion of a given population group that is either employed or looking for work; and 2) employment population ratio, which is the proportion of a population that is actually employed during the year. It is widely recognized that both the labor force participation rate and the employment population ratio for Black youth 16-24 years old have been declining for the last two decades.<sup>2</sup> Several theories have been advanced to account for this trend (e.g., increased school enrollments, migration to central cities, competition from women and other groups entering the labor force, disinclination to accept menial jobs, changes in demand, discrimination) but the fact is that no single-cause argument is sufficient and the problem will not respond to any known grand solution. All anyone is certain of is that millions of poor Black youth are entering full adulthood having had only the most marginal links to the labor market.<sup>3</sup>

Having entered the workforce, Blacks still constitute a disproportionate share of workers employed in the lower skilled, lower paying jobs, which are more often characterized by high turnover and greater incidence of unemployment. In 1979, for example, 32 percent of all employed Blacks nationwide were working as laborers and service workers (about twice the White proportion). These occupations are subject to higher-than-average joblessness. At the other end of the scale, however, a long-term rise in educational attainment has resulted in gains for many Blacks, so that in 1979, about 35 percent of all employed Blacks, nationwide, were in "white collar" occupations less sensitive to cyclical downturns (compared to 53% of Whites).<sup>4</sup>

Although by national comparison the overall labor force participation rate of Massachusetts teenagers is high and their unemployment rate low, the same Black/White differences exist. The unemployment rate for Black teenagers at the time of the survey illustrated below was nearly 1.7 times as large as that for Whites of the same age (33.3% vs. 19.3%); the labor force participation rate of Black youth was about 14 percentage points below that for Whites; and the employment-population ratio for Blacks was 18 percentage points below that for Whites.

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<sup>2</sup>*Ibid.*

<sup>3</sup>For a useful survey see: Paul Osterman, "The Employment Problems of Black Youth: A Review of the Evidence and Some Policy Implications," paper prepared for the National Commission on Employment Policy, 1979.

<sup>4</sup>Employment Training Report, *Op. Cit.*

CIVILIAN LABOR FORCE PARTICIPATION RATES,  
UNEMPLOYMENT RATES, AND EMPLOYMENT/POPULATION RATIOS OF  
SELECTED SUBGROUPS OF TEENS (16-19) IN MASSACHUSETTS:  
1976 (SPRING)\*

	(A)	(B)	(C)
Youth Subgroup	Civilian Labor Force Participation Rate	Unemployment Rate	Employment Population Ratio
All	66.9%	19.9%	53.6%
Men	71.4%	18.0%	58.5%
Women	62.2%	22.3%	48.3%
White	67.3%	19.3%	54.3%
Black	53.8%	33.3%	35.9%

Analysis of available data on the labor force status of youth throughout the 1970-78 period revealed that Massachusetts youth (16-19) continuously participated in the labor force to a higher degree than their counterparts nationwide. This same analysis reveals, however, that Black and Hispanic youth, the handicapped and high school dropouts encounter the most severe difficulties in finding jobs relative to their counterparts. Family income was found to exert strong and statistically significant effects upon the employment status of all youth, but especially upon Blacks and Hispanics.<sup>5</sup> These findings are neither new nor surprising: if you are young, poor and live in the central city, you are likely to possess few, if any, marketable skills. And if you are also a member of a racial or linguistic minority group, your chances of finding a decent job are slim.

The recommendations concerning Black youth contained in this Report are suggested by the disparity between the vocational education enrollment data we have seen for Blacks (Appendix A, Table III) and the magnitude of the problem we have outlined above.

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\*Source: Bokan, M., et al., "Recent Trends in the Labor Force Status of Youth (16-19) in the State of Massachusetts," Massachusetts Department of Employment Security Project on the Labor Force Status of Youth: Research Paper Number Six, April, 1980, p. 17.

<sup>5</sup>Andrew Sum, Edward Meehan and Jack Drago, "Trends in the Labor Force Status of Youth in New England," paper prepared for the New England Business and Economic Conference, November, 1979.

Our position with respect to Black youth unemployment is based on five assumptions. First, perfect definitions (as of "economically disadvantaged") and air-tight solutions are impossible. There exist no views of the reasons for Black unemployment and what should be done about it that have not been challenged or that unequivocally account for all the variables.<sup>6</sup> Second, it is quite unnecessary to quibble over such matters as whether unemployment rate or employment-population ratio is the better gauge of the problem. The most important questions to ask about Black unemployment are not "How real is it?" or "How recent are the data?" but "Why are employment levels for Black youth consistently below those of White youth, even when all variables are controlled?" and "What are the central issues to be addressed by those who profess to be trying to solve the problem?" Third, the problem of Black youth unemployment is deeply imbedded in racism, poverty and concentration of the Black population in central cities. Any solution must address these realities. Fourth, the overall solution must involve a combination of public and private efforts to equip Black youngsters with the specific job skills, basic work experiences, and escape routes from inner-city poverty areas, needed to function autonomously in an economic system where 80 percent of all new jobs are created in the private sector. Fifth, policy makers and planners in vocational education must not shrink from establishing goals, timetables and specific programmatic initiatives in which the descriptor "Black" is used as boldly as we now use such terms as, "Limited English Speaking," or "Handicapped," or "Women," or "Displaced Homemaker."

### ● Hispanic Youth

Data from official government sources, such as the Current Population Survey, are less precise for Hispanics than for Blacks, and are quite unreliable when disaggregated for sub-state areas, but even rough data demonstrates that the employment picture for young people of Hispanic origin is equally bleak.<sup>7</sup> And in a very real sense, the employment problems of all Hispanics have a significant youth dimension, because this rapidly growing population has a median age in the low 20's. During the 1977-79 period, for example, the average annual unemployment rate

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<sup>6</sup>For a useful discussion of a range of possible explanations, see Osterman, *op. cit.*, as well as Levy, Frank and Lerman, Robert, "An Analysis of the Black Youth Employment Problem," paper prepared for the Vice-President's Task Force on Youth Employment, 1980.

<sup>7</sup>For a survey of the methodological problems involved, see: Cardenas, G., "Hispanic Youth and Public Policy: Data Problems, Issues and Needs," paper prepared for the Vice President's Task Force on Youth Employment, 1980.

for Hispanic teenagers was 20.8 percent and their employment-population ratio was only 39 percent.<sup>8</sup> Clearly, youth employment and training programs need to strengthen the labor force attachment of Hispanic youth, as well as reduce unemployment rates.

Puerto Rican teenagers have the highest unemployment rate of any Hispanic teenage group (and, it should be noted, Puerto Ricans constitute the largest Hispanic group in Massachusetts). In 1979, for example, 29 percent of Puerto Rican youth 16-19 years old in the labor force were unemployed. In Springfield, Massachusetts it is estimated that 48 percent of Puerto Rican youth 16-24 years old are unemployed.<sup>9</sup>

Nationally, 57 percent of out-of-school Hispanic youth were not high school graduates. Compared to people with dominant English language backgrounds, the dropout rate was 4.5 times as high for Hispanics whose first language is Spanish, and 3 times as high for those of other national-origin language backgrounds. By any economic yardstick -- earnings, weeks worked, hours worked, distribution of higher paying jobs -- persons of Hispanic origin, and especially Puerto Ricans, lag behind the general population.<sup>10</sup> The unique cultural and linguistic characteristics of this population require employment/training and vocational education policies sensitive to the problems Hispanic youth encounter in the labor market.

The Council is concerned that both Black and Hispanic youngsters tend to be heavily enrolled in programs not directly related to opportunities in primary labor markets. They seem to be in "career awareness" and "career exploration" programs, or in traditional programs such as cosmetology, rather than in skills-intensive programs leading to better-paying jobs in growth industries. We realize that the reasons for this are complex, but it is a trend that should be studied carefully. Merely increasing enrollments of target populations is not enough -- we must change the enrollment mix.

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<sup>8</sup>Employment and Training Administration, Region I, Information Bulletin OCP81-11

<sup>9</sup>Massachusetts Department of Education, Bureau of Transitional Bilingual Education.

<sup>10</sup>National Puerto Rican Forum, "The Next Step Toward Equality -- a Comprehensive Study of Puerto Ricans in the U.S. Mainland," 1980.

As part of a study undertaken by a member of this Council's Access Committee, representing linguistic minorities, the distribution of Black, White and Hispanic males and females in the vocational education systems of Boston, Springfield and Worcester was examined. Findings indicated that women, in general, are hardly entering traditional, male-oriented programs; of those who do, few are Hispanic. Furthermore, the proportion of Hispanic women is inordinately high in programs providing preparation for the lowest entry-level jobs (e.g., cosmetology and nursing assistant).

There is minimal participation by Hispanics in the planning, administration, supervision or delivery of vocational education in the locales studied. There are no Hispanics at all on the State Plan Committee required under P.L.94-482, and, while women in general are not well represented on local advisory councils, there are no Hispanic women on such councils (there are four Hispanic males). There are only seven Hispanics working in program support in Boston, Worcester and Springfield, combined; in Boston, there are no Hispanic supervisors at all, and only two in Springfield. Black supervisors were found only in Boston.

An overview of student distribution in Chapter 74 vocational instruction programs revealed that, of total Chapter 74 enrollments of males in Boston, Springfield and Worcester, the majority is White; of total Chapter 74 enrollments of females, the majority of females was found among Blacks in Boston, and Whites in Springfield and Worcester.

The study went on to review Chapter 74 programs in the above three cities, course by course, in light of Hispanic, Black, White and "other" participation. Limitation of space precludes the presentation of all the data here. The Council will be publishing this study in the spring of 1981.

During the past two years, the Council worked closely and profitably with the Division's Bilingual Vocational Education Specialist. This position is now vacant, and we urge the Division to actively seek a replacement, of equally high calibre, to continue the work so ably begun.

● Status of Bilingual Vocational Education in Fall River

Two years ago, in response to the filing of a Lau complaint and subsequent investigation by the Office of Civil Rights, the city of Fall River was charged by the Office of Civil Rights with discrimination against children of Portuguese origin. Specifically, the city was cited for failure to:

1. Adequately identify the primary or home language of national origin minority students.
2. Adequately assess the language dominance and proficiency of these students in their primary language and English.
3. Provide and place national origin minority students in programs to meet their language and educational needs.
4. Assess and evaluate the academic progress of national origin minority students for placement into regular classes.
5. Effectively notify parents of students whose primary or home language is other than English.

While a compliance plan was written, and transitional bilingual education (TBE) programs expanded, bilingual vocational education in Fall River has continued to be problematic. At the request of the TBE Parent Advisory Council (PAC), which made a formal presentation at this Council's December, 1980 meeting, the Council made two visits to Durfee High School and one to Diman Regional Vocational Technical School.

Chief among the concerns brought to the Council by the PAC were:

1. that there is little evidence of the existence of bilingual vocational education programs, other than on paper, and where they do exist, Portuguese students who would be legitimately classified as "limited English-proficient" (LEP) are underrepresented;
2. that the few Portuguese LEP students who are in vocational programs are overrepresented in programs leading to menial, "dead-end," or non-existent jobs;

3. that, in instances where bilingual vocational education instruction is offered in Portuguese and English, the quality of Portuguese is markedly inferior to the English;
4. that the TBE Parent Advisory Council has not been consulted or involved in any substantive manner in the planning of bilingual vocational education programs, or in the outreach and recruitment efforts which are basic to the success of such programs; and
5. that communication among and between Durfee High School, Diman Regional Vocational Technical School, the Fall River CETA prime sponsor and the Portuguese community is seriously deficient, to the point where the Portuguese community doubts the commitment of the Fall River school system to the goal of equal educational opportunity for all its citizens.

The Council's visits to the two schools gave some evidence of a good faith effort on the part of the schools' administrators to address the needs of LEP Portuguese students and to involve parents in the selection of bilingual personnel and in the recruitment of students. The Division is well aware of the problems and both the Division and the Council will monitor progress throughout FY81, after which, the Council will be able to make considered recommendations in its FY81 Annual Report.

The Council does note the following initiatives specifically detailed in the State Plan to provide programs and services for priority populations, including minorities:

- Grant recipients must expend a "minimum" dollar amount for priority populations before funds may be expended for other programs.
- Local schools are encouraged to utilize P.L. 94-482 funds to develop recruitment programs for priority populations.
- If the minority students are disadvantaged (economically or academically), local applications for federal funds must include descriptions of the recruitment programs.
- Pre-vocational programs are fundable under P.L. 94-482 and minorities are among the priority populations.

- Although P.L. 94-482 funds are not used for career education (P.L. 95-207), the State Plans for both Vocational Education and Career Education specifically require schools to have the underserved, including minorities, as the priority population for all aspects of career and occupational education.
- Selective secondary schools are given technical assistance to improve recruitment and admissions practices.
- For fiscal years 1981 and 1982 the Division of Occupational Education will implement a public information program aimed at parents and students, to increase interest in occupational education among underserved populations.

### Conclusions

There are a number of considerations regarding the use of "goals" upon which there should be consensus:

First, a good faith effort to achieve equity in the use of resources requires quantitative measures of status and goals, and these will necessarily be related to the proportion of minorities in the area served;

Second, meeting quantitative targets can be no more than an intermediate goal; the ultimate test of success is quantity and quality of job placement, compared, if possible, to a control group that did not take part in the program but which otherwise exhibits similar characteristics.

Third, it would be appropriate for the State Plan to offer data which compared enrollments of priority populations to the proportion of those populations in the general population, if only to let the comparison speak for itself in raising questions that ought to be the subject of local, and possibly state, concern. We realize that people of good will will differ on the interpretation of such data and on what should be done in light of what they reveal. Our hope is that they will stimulate a dialogue at the local level between persons of good will, so that a consensus at the level of action can be achieved.

### Recommendations

1. That the Board of Education develop a policy under which significant incentives are offered to those school systems improving their enrollment of minorities in technical skills training programs and administrative and teaching positions.
2. That the State Plan suggest enrollment targets for disadvantaged Black youth based on their numeric representation in the geographic district being served.
3. That the State Plan suggest enrollment targets for disadvantaged Hispanic and other linguistic minority youth based on their numeric representation in the geographic district being served.
4. That the State Plan clearly identify dollar amounts to be targeted to disadvantaged Black youth.
5. That the State Plan clearly identify dollar amounts to be targeted to disadvantaged Hispanic and other linguistic minority youth.
6. That instructions for completing the Local Plan stress the need for access to all occupations for disadvantaged Black youth.
7. That the term "disadvantaged Black youth" be used consistently, where appropriate, throughout the State Plan; that the term "minorities" be expanded to include "minorities of both sexes;" and that the term "women" be expanded to include "women of all ethnic groups."
8. That the Department of Education take steps to ensure appropriate representation of Blacks, Hispanics and other linguistic minority groups, and women of all ethnic groups, at every level of the planning process for vocational education.

E. Special Education

Massachusetts historically has held a leadership role in developing legislation and designing educational programs for its special needs population; Chapter 766 of the Massachusetts General Laws provided the model for the formulation of P.L.94-142, the federal law addressing this population.

● Joint Occupational and Special Education Funding

The Department of Education's continuing commitment to the provision of appropriate, comprehensive vocational education to all handicapped persons, and its forward-looking approach to meeting this commitment via the utilization of joint funding are to be highly commended. The Joint Occupational Education/Special Education Project seeks to expand occupational education opportunities for secondary school age youth in occupational education programs operated with Chapter 74 funds, through collaborative planning and program development between occupational education and special education personnel, at the local level. The Project also coordinates the management of federal funds available under P.L.s 94-142 and 94-482.

On a three-year cycle, about \$3.4 million is allocated, statewide, to specialized vocational programs, \$1.4 million coming from the Division of Occupational Education, and \$2 million from the Division of Special Education. To date, programs have been designed for skill training, pre-vocational assessment, school/industry cooperation, and in-service education for staff. Currently, there are about 45 programs operational.

The Council has expressed increasing concern about the disproportionate representation of special needs youth in regional vocational schools, and the Department, itself, has acknowledged that it is impossible to service all of the vocational needs of special needs youth in the regional vocational technical schools. Parents increasingly are rejecting education plans which do not call for the delivery of vocational education services at the comprehensive high schools. For both of these reasons, the Department and this Council concur that vocational education programs being offered in the comprehensive high schools will have to be increased.

● Chapter 766 Program Audit

A Special Education Program Audit of the Boston public schools was conducted by the Greater Boston Regional Education Center from March 26-30, 1979. This audit was undertaken to monitor compliance with legal mandates for special education, contained in Chapter 766 and P.L. 94-142. While the findings indicated significant gains in special education in Boston since a 1976 audit (increased program options, reduced waiting time for CORE evaluation and reviews), there remained some issues requiring further attention, several among them particularly addressing target populations (the need for more consideration of procedures, communications with parents, and services to non-English speaking students; the over-referral of minorities to special education). While not specifically stated, the latter issue is most likely germane to both regular and special needs students in vocational education programs as well.

Very little reference to vocational education is made in the Audit Report, although Section 503.1 of Chapter 766 does, in fact, speak to vocational education for special needs students. The Report does mention, in passing, that prevocational and vocational special needs programs are offered, including: 1) the Alternative Vocational Program, 2) Vocational Program for the Deaf and Multi-handicapped, and 3) the Occupational Skills Development Centers. The results of the recently completed audit of vocational education programs in Boston probably will also shed some light on this important issue.

Recommendations

1. That vocational program offerings for special needs students at comprehensive high schools be increased through utilization of monies available through joint funding.
2. That community based organizations (CBOs) receiving support from vocational education monies be encouraged to utilize space in local education agencies (LEAs), where necessary equipment is already in place.

F. Sex Equity

A simple analysis of enrollments demonstrates that although progress has been made, vocational education in Massachusetts still mirrors the single-sex patterns evident nationwide. Female enrollments dominate health occupations (88%), occupational home economics (79%), consumer and homemaking (75%) and office occupations (72%). Moreover, certain instructional programs within these broad occupational clusters are even more strikingly female-dominated; e.g., dental assisting (100%), cosmetology (99%), child development and guidance (98%), housing and home furnishings (96%), secretarial and related (94%). On the other hand, males continue to make up a disproportionate share of enrollments in trade and industrial (86%) and technical programs (84%). Within these categories, for example, males constitute 95% of enrollments in auto mechanics, 97% in electricity, 97% in machine shop, 94% in carpentry, 99% in plumbing, 97% in masonry, 95% in electrical technology and 98% in automotive technology.<sup>1</sup>

This pattern in program enrollments is also seen in school enrollments. Although females are at least 50 percent of the school-age population in Massachusetts, an analysis of total enrollment in forty-eight "selective" secondary vocational-technical schools in the State reveals that only 27 percent is female (up from 25 percent in 1977). But this average figure is quite misleading, since there are twenty-two such schools with female enrollments of less than 25 percent, and two with female enrollments of greater than 80 percent.<sup>2</sup>

The point of this analysis is not to accuse the State Board or the Division of indifference, but to illustrate what we all know -- that a lot more work needs to be done. Every report, article, book, survey, analysis and observation of women in the work force makes one point perfectly clear: there are more women working today in the United States than ever before, but, in comparison to men, they are earning less. They are concentrated in the traditional female occupations -- more than half in clerical and service -- which are low-paying, low status and have limited opportunity for advancement. The disparity in wages has actually increased and the use of potential talent at its fullest range is scarcely realized.

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<sup>1</sup>Source: NCES Form 2404, 1978-79 Data for Massachusetts.

<sup>2</sup>Source: Massachusetts Department of Education, 1979-80 Admissions Update Report.

A woman is three times as likely as a man to earn less than \$7,000 a year. The widening male-female pay ratio (57% at the present, 64% in 1955) means that a woman must work nine days to earn what a man earns in five. Since 1950 the number of women in the work force has doubled while the number of men has increased only by one quarter. Therefore, while employment opportunities for women have improved, the ratio of women's to men's salaries has declined.

State and federal legislation written to diminish and exclude employment discrimination on the basis of sex, plus many good-faith programs developed and administered toward the same goal, and the publicity and force of the feminist movement are generally credited with opening doors of employing institutions of all kinds to women. Mandated job opportunity may not have eliminated sex bias, but to a moderate extent, it has allowed some women to pass through despite it.

Occupations are labelled "traditional" and "non-traditional" in direct relation to the percent of women working in them. The same is true of training programs for those occupations. Roslyn D. Kane, in a study of non-professional, postsecondary vocational training conducted for the U.S. Office of Education, puts those percentages at above 75% and below 25% respectively. She suggests that the middle group between the two is "mixed," and "neutral," in image.<sup>3</sup> Many of these are jobs that have not been characterized either as "masculine" or "feminine" partly because they are in new areas of employment which have not yet taken on a sex identification. (Some examples: data processing; computer science; commercial art; environmental health; finance/credit.) Adults in a position to advise girls about career options, especially when they may be considering non-professional vocational training, should recognize the advantage of these often overlooked areas where girls would not be as likely to face the problems of sex-stereotyping or societal attitudes toward employment in "masculine" occupations.

The move from traditional to mixed or new occupations is much easier than to non-traditional. A later shift to non-traditional, if it looks desirable, is thus also made with less difficulty. Efforts should be made to acquaint adolescent girls with these options, as both

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<sup>3</sup>Kane, Roslyn D., et al., A Study of the Factors Influencing the Participation of Women in Non-traditional Occupations in Postsecondary Area Vocational Training Schools, Volume I: Narrative Report, R. J. Associates, Inc., Arlington, Virginia, November, 1976.

training and employment opportunities. But just knowing the options, having 'choice' information, is not sufficient. Girls are remarkably ignorant of the work force and wage figures for women and the significance of them for their own futures.

America is growing as a nation of service providers and consumers in schooling, government, health care, maintenance, entertainment, communications, and information, to name just some of the fast-growing segments of our society. At the same time, we must cope with the grave and complex societal issues such as allocation of energy and food, adequate housing, transportation, population control, and national security. If the economy is to support both the service and the goods-producing components satisfactorily, research and development, productivity and trade must grow accordingly. We will see this happen in direct proportion to the innovativeness and skill of, and support given to, the scientific and technical community, since the application of science and technology in all its aspects is necessarily a major component of this growth. When we deny women access to that community, we lose a valuable human resource, literally half the total available, as well as the goal of equality.

Science and technology are areas with predictable growth potential. The employment they offer at all levels of entry and education are goals to shoot for now and for at least several decades into the 21st century. Barring unforeseen national and international crises, it would seem to be sound advice and guidance to young people to prepare themselves at least for the option of work in these fields.

Despite the fact that one out of two women today will more than likely spend a portion of her life working for pay, there are few, if any, courses or programs designed to help them understand why it is important for them to think ahead about preparation for continued training and long-term commitment which would lead to advanced status in the labor force at a higher wage level. Where this is clearly not an option -- and many women and minority students can't contemplate an investment in four or more years in postsecondary education -- school counselors, science and math teachers and parents must make them aware of the alternatives: vocational-technical high schools, apprenticeships, public and private two-year technical schools. Long-range occupational forecasting, as mentioned earlier, indicates that fields requiring some technical competence will experience growth in the next 15 years.

Women must also be made aware of the alternative course options in the schools, and offered support for their choices. Kane's recent study points out that the women she surveyed in postsecondary vocational education received no educational or parental support for their non-traditional choices until after they had entered their respective fields. She further reported that junior high school teachers and counselors were not influential in the career decision-making process. She comes to this conclusion after much research which indicates that women are making this decision on their own, and therefore should be given the widest possible assistance in reaching this decision. In Massachusetts, we need better occupational guidance and counseling for young women, using the information capacity of the Massachusetts Occupational Information System (MOIS) computer. Programs are needed in the junior high schools in particular, to assure girls of their welcome and aptitude in all of the exploratory courses for high school vocational programs.

Some women, in diminishing numbers, prefer to be full-time homemakers. For those who do not, the issue is how to get them to consider the traditionally male areas of technology, science, trades and industry as suitable for them, or the mixed areas which are not yet sex-identified. The operative word here is consider. How do we widen the range of occupations to which girls aspire? How, indeed, do we assure that they learn the economic facts of women in the work force today? And how do we change the institutions through which they must pass to achieve a sex-neutral education?

There are a number of approaches which have been adopted to bring about societal change and a broadening of attitude on the part of women, the influencing adults in their environment, and the community in which they live, but there is a need for more programs, for a combination of ideas, and for some entirely new emphases.

Here is a sampling of approaches, some proposed, some already in action:

- Career awareness development in young and adolescent girls. This would introduce them to information, appropriate to their age, about available occupations, who are employed in them, and their relevant values and skills, as they form their concept of the world of work. Here the private sector has a strong and unique role to play, both in the schools and on industry sites.

- Role model programs for junior and senior high school girls, especially from occupations where women are seriously underrepresented.
- Workshops for teachers and counselors of junior high school girls. Participants would be those people in school systems who are identified as being interested in effecting changes that will encourage girls to explore educational options that prepare them for vocational, technical and scientific careers.
- Courses/workshops for students, teachers, counselors, parents on subjects such as socialization, adolescent development, career development, the labor market, organizational change strategies.
- Identifying areas of sex and ethnic stereotyping; development of materials for school/parent organization/community use.
- Greater certainty about definitions and issues in career counseling and career inventories will be an essential step to assure sex-fair counseling in the decade of the '80s and beyond.
- On-site visits by school personnel to local businesses and industries with a technical and/or scientific base or component. These would include opportunities to meet company administrators -- technical, operational and personnel - and for discussion with other company personnel from a broad range of careers (technicians, engineers, assembly-line workers, accountants, computer programmers, etc.).
- There also should be opportunities for adolescent girls to meet female and minority group employees, to interview them about their jobs, career pathways, etc., and to hold group discussions about affirmative action programs, trends in the specific industry field, company training programs, and outlook for employment. An exemplary project in this regard is Massachusetts Institute of Technology's Work In Science and Technology (WITS), which has run several programs for women and minorities in technical careers.

The Council notes that the Division has set specific goals to address the need to bring about sex equity in vocational education, as outlined in the current Three Year State Plan for Vocational Education, and we support these goals:

- Create awareness of vocational programs designed to reduce sex bias and sex stereotyping in vocational education programs.
- Gather, analyze and disseminate data on the status of male and female students and employees in vocational education.
- Develop and support actions to correct problems brought to the attention of the Division of Occupational Education.
- Create awareness of the Title IX complaint process.
- Review the distribution of grants to assure that the interests and needs of females are addressed in projects.
- Review vocational education projects, statewide, for sex bias.
- Monitor the implementation of laws prohibiting sex discrimination in hiring, firing and promotion procedures in the State, relative to vocational education.
- Assist LEAs and other interested parties in the Commonwealth in improving vocational education opportunities for females.
- Make information concerning sex bias and stereotyping in occupational education available to advisory councils, the Commissioner and the general public.
- Review and submit recommendations for the Five-Year Plan and Annual Program Plan with respect to overcoming sex bias in vocational education programs.

A strong effort needs to be made to get more females into non-traditional, skills-intensive programs leading to career ladders in primary labor markets, and this attempt must begin with attitude modifications, even before the secondary level. The Council reiterates its position that it is not enough for the Division to say that enrollments are increasing. For the data to be meaningful, the Board of Education needs breakdowns of enrollments by sex and by six-digit OE codes. The data base now being compiled by the Division for the Vocational Education Data System (VEDS) should provide such information, reliably, by the end of FY 1981. We see no reason why the data collected in October of each year cannot be processed and available to the Council by January of the following year.

Recommendations

1. That the Division of Occupational Education compile and disseminate, at least annually, detailed data on sex equity in vocational programs, including information on teachers and administrators.
2. That the Division of Occupational Education closely monitor enrollments in technical programs to determine if female enrollment is increasing.
3. That the Board of Education place even greater emphasis on the need for recruitment, counseling and support service projects designed to overcome sex bias and stereotyping in occupational education.

G. Career Education Incentive Act

1980 was the first year for the availability of federal funding under the Career Education Incentive Act (P.L. 95-207), to implement the State Plan for Career Education, which had been approved by the Board of Education in May of 1978.

The FY 1979 allocation of \$456,278 for Massachusetts under P.L. 95-207 was not announced by the U.S. Office of Education until July of 1979, when all local schools were recessed for the summer. Consequently, the process of soliciting grant proposals from local education agencies for the use of these funds had to be delayed until the fall of that year, after the schools had re-opened, and those projects that subsequently were approved and funded were not able to begin operating before January of 1980.

Because of the limited amount of funding available, the Department of Education chose not to allocate the funds on a formula basis to all local education agencies in the State, but rather to identify those school systems within the State which were judged to be "in greatest need" in terms of available local educational resources. These schools subsequently were invited to apply for a limited number of grant awards. The criteria to be used by these selected school systems in developing proposals were based on the goals and objectives for career education as stated in the State Plan of May, 1978.

As a result of this selective RFP process and subsequent review of the proposals submitted through the six Regional Centers of the Department of Education, the Board of Education approved 24 grant awards to local education agencies for the first year of activity under the Career Education Incentive Act. In addition to these local activities, the Board also approved eight in-service training programs for LEA school personnel to be conducted through the Commonwealth In-service Institute, and a State leadership project to be administered by the Institute for Governmental Services at the University of Massachusetts. The latter project consisted of six one-day, intensive, regional career education workshops for LEA personnel in the Department's six regions, and a two-day summer workshop for Department of Education staff. In addition, the Institute for Governmental Services published a bi-monthly newsletter on career education activities, developed a brochure on career education for distribution throughout the State, and produced a prototype career education practitioners' handbook (covering such topics as needs assessment, implementation strategies, staff development, and evaluation measures).

The Congressional appropriation for the second year of P.L. 95-207 activity was at a reduced level, and the Massachusetts allocation for FY 1980 was \$328,689 compared to \$456,278 the previous year. Once again, the notification of the grant award was late in reaching the State Department of Education and the solicitation of applications from LEAs for grant awards had to be delayed until September of 1980. As this report is written, a total of 16 LEA project proposals have been approved by the Board of Education (at its December, 1980 meeting), and it is anticipated that an additional five or six LEA grants will be approved for the second year funding cycle. The reduced number of LEA grants reflects the reduced level of federal funding in 1980.

For purposes of second year P.L. 95-207 activity, those LEAs which had received grant awards in the first year were ineligible to re-apply. Therefore, while the goals and objectives of the second year funded programs are, in many cases, the same or similar to those conducted in the first year, a different set of LEAs serving different populations is benefiting from the limited funds available. The Board of Education has stated its intention to continue to use a percentage of its federal funds available for state leadership project activities, and for a reduced number of in-service training programs administered through the Commonwealth Institute.

The Advisory Council commends the Department of Education for its equitable and efficient handling of P.L. 95-207 funds, despite the late availability of these funds in both FY 1979 and 1980. The Council also is pleased to note the substantial commitment of the Department to the implementation of career education in the form of human resources and facilities. The Department, through its Division of Occupational Education, has assigned one staff person at each of its six Regional Education Centers to be responsible for the development of career education programs, for providing technical assistance to local school personnel, and for the monitoring and evaluation of funded programs. In addition to these regional personnel, there is a State coordinator for career education in the Department's Boston headquarters office. All of these career education personnel are fully supported by state funds, and state facilities are made available for regional workshops and other regional career education activities.

H. Boston

In its FY 1979 Annual Report the Council recommended to the State Commissioner of Education that a program and fiscal audit of vocational education be carried out in the City of Boston. The Council sought information in six broad categories:

1. compliance with Chapter 74 and P.L. 94-482 regulations;
2. implementation of the Court-ordered Unified Plan, as amended;
3. enrollment of racial and linguistic minorities, females and handicapped students in vocational education programs;
4. status of vocational education programs offered in high schools and the relationship of such programs to the Occupational Resource Center;
5. availability of data needed to evaluate and manage Boston's vocational education system; and
6. answers to allegations of inadequate inventory control of materials and equipment, and of improper and unauthorized use of vocational students, materials and equipment on "special projects" bearing no relationship to curriculum.

In March, 1980, the Cambridge office of American Institutes for Research (AIR) conducted a program audit of occupational education in the Boston Public Schools, for fiscal years 1979 and 1980. In addition, the State Department of Education's Bureau of External Audit conducted a fiscal audit of programs funded in fiscal years 1977 and 1978. AIR issued a preliminary report of program audit findings, together with recommendations for change, in September, 1980. No findings as to the fiscal audit had been released by December 31, 1980.

The preliminary program audit report concluded flatly that the Boston Public Schools were in non-compliance with

federal and state laws related to access, facilities, equipment, curriculum, safety, accountability and management. The audit also found occupational programs functioning "in isolation" from other parts of the school system, and characterized by:

- lack of information flow between teaching staff and administrators at every level;
- lack of parent/community involvement;
- lack of integration among programs; and
- lack of systematic program evaluation and modification.

Among the most serious problems revealed by the program audit is the school system's inability to produce accurate information of the most basic kind; e.g., "What vocational education programs are currently operational and who is enrolled in them?" In addition, the system's management structure is characterized, at every level, by "interim," "transitional," and "acting" personnel. The results are predictable: the delivery system, in reality, consists of virtually autonomous sub-systems which do not share information; it is impossible to measure progress objectively; and there is little incentive for anyone to tackle the hard decisions necessary for substantive reform.

These results are not attributable to any recent attempts to deliberately thwart the reorganization and redirection of vocational education in Boston. Rather, the present imbroglio has its origins in at least 20 years of School Committee disinterest in vocational education, and funding decisions based on patronage rather than merit, furor over desegregation, indifference from the higher education and business communities, power struggles between and among the School Committee, Boston Teachers' Union and the Mayor's office, and the persistent image of vocational education as a "dumping ground." The Council notes, however, that the Boston Teachers' Union has, in recent years, supported various efforts to restructure Boston's vocational education management system, citing as reasons many of the causal factors listed above.

The Council had been optimistic with the opening of the \$35 million Hubert H. Humphrey Occupational Resource Center in September, 1980. Highly touted as the driving force behind Boston's new commitment to quality vocational education, the ORC had been ten years in the making but was

finally open (if not fully operational), offering 50 programs in nine occupational clusters, with personalized, competency-based curricula. The ORC opened without a permanent Director, and the status of vocational programs in district high schools was uncertain, but School Superintendent Robert C. Wood seemed, at last, to be turning his attention to comprehensive restructuring of vocational education in Boston.

A series of blows to the school system soon diminished the Council's optimism. Superintendent Wood was fired abruptly only days before school opened; a School Committee member was charged by the FBI with attempted extortion and subsequently resigned from the Committee; bus drivers went out on strike; the School Committee became locked in a bitter struggle with the Mayor over the school budget, which threatened to close down the entire system for lack of funds, by late winter, 1981; and on top of this the Commonwealth's voters approved a radical "tax-reform" law, the effect of which was that the City of Boston was looking at a potential revenue cut of \$97 million next year, while the public schools were demanding an additional \$46 million. The Council has serious concerns that some of the best programs scheduled to be opened at the ORC in 1980-81 will be drastically curtailed or destroyed by the budget squeeze on education in general and Boston in particular. No one doubts that cuts must be made in the Boston Public School budget but, so far, the School Committee has failed to establish credibility in its handling of the crisis.

It is important to note that, as it has been in the past, the Council continues to see countless examples of individual dedication to the goal of providing quality vocational education to Boston's young people and adults. The program audit had this to say about instructional staff.

"One of the most consistent themes throughout the data collected in the Boston Program Audit is that the instructional staff of occupational programs exhibit a high degree of professional dedication and outright resourcefulness in a work setting which is often devoid of materials and/or equipment; sub-par in terms of locations and general upkeep; lacking in aggressive administrative support, supervision, and involvement; and isolated from the mainstream of policy decision-making."<sup>1</sup>

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<sup>1</sup>Preliminary Report of Boston Program Audit, July, 1980, p. 13.

The Hubert H. Humphrey Occupational Resource Center is an impressive building and it is operational (although as of this writing some \$2 million in equipment has been caught up in a city-wide budget freeze). The business community, largely through the efforts of the Tri-Lateral Council, has assisted School Department planners in every way possible and was instrumental in assembling an extensive network of program advisory committees. Career awareness programs have been introduced in middle schools and skills training programs at the secondary level are being brought up to date.

The Council notes also that the Boston School Department has responded to the recommendations contained in the preliminary audit report and the Council is represented on the Review Panel considering those responses. Boston's initial plan was quite general -- unacceptably so in many instances -- but there is reason to believe that a detailed action agenda can be negotiated. As of this writing, however, the results of the fiscal audit have not been made public and the Council is not able to comment.

In the winter of 1979-80, the Council's student member designed and administered a survey to twenty-three of her fellow students (seven freshmen, seven juniors and nine seniors) in the Trade and Industry - Cooperative Education Program at Dorchester High School. The results follow:

- (1) Twenty out of twenty-three students said they felt positively about being in the industrial arts program; yet eleven said they would transfer to a business or college program if they could.
- (2) Eighteen out of twenty three students expressed satisfaction with the alternate week arrangement of shops and academics.
- (3) While nine students indicated they felt "left out" from the rest of the school, thirteen of the twenty-three felt that industrial arts students should have separate academic classes.
- (4) Twenty-one students were confident that what they were learning would be of use to them in the future.

- (5) Sixteen of those interviewed saw room for improvement in the shops.
- (6) Fifteen students expressed a need for an improved academic program.
- (7) Only three students were aware of any racial problems at the school.
- (8) Only one out of twenty-three students had heard of the ORC.

This survey had a catalytic effect on the Council's thinking about attitudes of young people toward vocational education. It spurred ideas for further research which the Council would like to undertake, perhaps in conjunction with the Division.

The Council notes three recent actions by the Board and the State Department of Education to address some of the problems discussed above:

- 1. The Department will devote more resources to periodic fiscal and program audits of occupational education programs in Boston,
- 2. The State Board of Education will award state and federal grants to Boston, conditional upon firm evidence that the findings contained in fiscal and program audits are being addressed; and
- 3. The Department will establish a special "Boston Task Force" within the Greater Boston Regional Education Center to give technical assistance to Boston as it reorganizes its occupational education system.

#### Recommendation

That the Division of Occupational Education conduct a survey of disadvantaged Black and Hispanic youth in Boston to determine their attitudes toward vocational education and what motivates them to choose the training programs they do elect.

## I. Professional Development

In the area of professional development, the Department has continued to expand its focus, evidencing its awareness of the need both to train and retrain teachers to keep pace with the rapidly changing needs of the vocational education consumers of the 1980's. The Department also has addressed the needs of teachers displaced from the classroom due to declining enrollments.

Five projects were funded by the Division of Occupational Education for FY 80 and 81 and more RFPs will be issued. The attempt of the Department to keep abreast and ahead of the ongoing need for professional development is to be highly commended. The movement of the Department in this direction responds to a long-standing concern of this Council with the quality of vocational teacher training. It is vital that minority candidates move into positions as vocational instructors, both for their own sake, and to serve as role models for the many minority students the vocational education system of this Commonwealth serves.

In the course of the development and implementation of these projects, some problems have surfaced (and are being addressed), including:

- It is difficult to recruit people who are currently employed in skilled trades into the less lucrative field of teaching.
- There is no guarantee of employment upon the completion of training.
- Many of the people recruited have been out of school for many years and, therefore, encountered academic re-entry problems.
- For those currently employed, course meeting times must be tailored to meet their schedules.
- The current climate of fiscal austerity, Proposition 2 1/2, hiring freezes and "riffing" (teacher layoffs due to reduction in force) tends to give a dismal outlook.

- There is a need for a strong counseling program to deal with trainees' anxieties about returning to school, making career changes, fears of humiliation, GED testing, job interviews, etc.
- For many of the recruits, documentation of six years of prior work experience, necessary for certification, is difficult to obtain.
- Existing vocational competency tests need to be revised and new ones written.

The difficulties which have emerged in no way diminish the positive effects of these projects, and the Council encourages continued efforts in this direction.

- Recruitment and Training of Minority(Black)  
Vocational Instructors

Recognizing the marked shortage of and need for trained, qualified minority vocational instructors, the Division issued an RFP to meet this need, and subsequently funded two such programs, one at Boston State College and one at Westfield State College. The Boston State program had identified 22 candidates as of December, 1980, and plans to begin course instruction in the spring of 1981. Westfield State College has trained 26 people since May, 1980 and completed Phase I of its project on December 31, 1980. Phase II, running from January 1-December 31, 1981 is an expanded program, with recruitment targeted for 30 black and 30 bilingual candidates. The latter phase will recruit from January through March and begin training in April, 1981, utilizing a model adapted to Massachusetts' needs from the Ohio State model. This is a version of competency-based vocational teacher education, and allows for a broad degree of flexibility.

- Recruitment and Training of Bilingual Vocational  
Instructors

Fitchburg State's program to train bilingual vocational instructors is currently in its fourth year.

To date, the program has graduated 108 students, 35 of whom have found jobs in their new field. Although the figure may, at first glance, appear low, it does not reflect the number of students currently in the process of obtaining certification.

- Professional Improvement Conference

In June of 1980, the Division again funded a two-day Professional Improvement Conference for Occupational Program Personnel, administered by Fitchburg State College. This conference provided for 30 clock-hours of workshops to meet half of the Commonwealth requirements for professional improvement for Chapter 74 related approved personnel. The conference was attended by approximately 450 participants.

- Vocational Competency Testing

A third project funded at Fitchburg State College was in the area of vocational competency testing for people working in the trades who are seeking approval as vocational teachers. The process leading to provisional certification includes as its second step, a written test. Fourteen of approximately thirty existing tests were revised twice in FY 80, and four new ones written. It is intended that revisions in the tests (both written and practical) will be made annually, to ensure that validation is obtained, and to update them so that they accurately reflect current programs. Three highlights of this process are to be particularly commended:

- (1) The new tests were composed by educators and industry people, working cooperatively.
- (2) For the first time, through the aid of a consultant and a computer, statistics have been generated for the purpose of validating the tests. The Council looks forward to seeing the results of these statistics in the report which Fitchburg State College will be presenting to the Division in January, 1981.

- (3) In the summer of 1981, a computerized "item bank" will be developed, so that multiple test items can be stored, providing for the possibility of generating a vast number of different tests which can be tailored to specific programs.

- Bilingual Vocational Educators' Conference

In November of 1980, the Division sponsored the second annual conference for bilingual vocational educators. The conference was planned based on suggestions from last year's participants, and was attended by 120 people from four states. Each participant was able to attend three hour-and-quarter workshops. A total of sixteen workshops was offered, an increase over last year's conference offerings. A measure of the success of this conference can be seen in that this year's participants requested that the conference be extended to two days next year. The Council encourages the Division to continue its excellent work in this area, and, particularly, encourages the continuation of the annual bilingual vocational educators' conference.

- Retraining of Teachers Affected by Reduction in Force

The dilemma of teachers who have lost their jobs through reduction in the teaching force, in the face of fiscal austerity and declining enrollments, has been addressed by the Division in the form of a computer training course for such teachers, conducted on the premises of Keefe Vocational Technical School. The High Technology Council and Massachusetts Teachers' Association worked closely with the Division in setting up this program. Three hundred applicants competed for the thirty-three available places in the program, liberal arts graduates scoring highest on the aptitude tests.

Sixty-six percent of the program's graduates have found jobs (in the \$17,000-\$20,000 range) after completion of the six months of training. Forty to fifty new trainees enrolled for the second cycle of training which was scheduled to begin in January, 1981.

- Commonwealth's In-service Institute

A substantial in-service training project on vocational education for the handicapped was undertaken in FY 80, for professional personnel from comprehensive school districts and regional vocational school districts. The project is a major component of the Department's intensive plan to expand vocational education opportunities for secondary school age students with special needs, training over 3,000 people in recognizing issues concerning vocational education for the handicapped -- focusing especially on attitudinal barriers. Under the Commonwealth's In-service Institute, individual school districts can apply for in-service training programs to provide them with specific skills and information to prepare individualized education plans (IEPs).

The fact that this training program was developed for and by local school districts resulted in a high degree of ownership by local school personnel. That sense of ownership, coupled with clear administrative support, bodes well for the encouragement of new and/or expanded vocational education opportunities for students with special needs.

#### Recommendation

That the Board of Education continue to support, at adequate levels, the current efforts to recruit and train bilingual and Black vocational instructors.

## J. Local Advisory Councils

In the Massachusetts Annual and Five-Year State Plan and subsequent Annual Plans, the Board of Education certified that all eligible applicants, in order to access funds under Public Law 94-482, would be required to establish Local Advisory Councils to:

1. review local manpower demand;
2. suggest vocational programs to meet local manpower demand as identified.

Membership on these councils includes representatives of the general public, business, industry and organized labor. The requirements specify "an appropriate representation of racial, ethnic, and linguistic minorities and handicapped persons in the programs, schools, communities or regions which the local advisory council serves, yet in research undertaken by this Council, a marked absence of Hispanics was noted in the membership of local councils in Boston, Springfield and Worcester, all of which communities have substantial Hispanic populations.

We do not know how many local advisory councils for P.L.94-482 funded programs exist in Massachusetts. Moreover we do not believe the Division knows for certain. But on page 221 of the current Three-Year Plan for Vocational Education, there is an analysis of local advisory council membership composition and representation which indicates that, in the six educational regions, there are a total of 2,243 local advisory council members reported. The Division summarizes the membership of local advisory councils according to type of representation, including handicapped, racial and linguistic minorities and females, but offers no suggestions as to which groups need to be strengthened.

### ● Report on MACVTE Survey of LACs

The State Advisory Council has been actively seeking to improve its communications with local councils. In November of 1979, letters were sent to the Occupational Education Team Leaders at each of the six Regional Education Centers, requesting their assistance in disseminating questionnaires and obtaining mailing address of local advisory council members.

Thirty-five questionnaires and requests for mailing lists were enclosed with each letter, to be sent out at the discretion of the occupational education team leaders. Where there were more than thirty-five school districts in a region, the thirty-five selected to be surveyed were chosen on the basis of which were largest and presumed to be most active.

Of the 210 forms (presumably) sent out, the State Council received 21 completed forms, four blanks and four mailing lists; a rather poor response. Analysis of the data revealed the following percentages of representation, shown juxtaposed with the State's data.

Region	Total No. Members Reported		%Racial/Ling. Minorities		%Females	
	Dept.	Council	Dept.	Council	Dept.	Council
I Greater Boston	384	173	5.5%	4.0%	29.7%	24.3%
II Northeast	496	32	7.9	-0-	30.2	46.8
III Central Mass	583	116	4.0	.86	27.1	18.9
IV Southeast	322	NRR*	10.6	NRR*	27.0	NRR*
V Springfield	324	16	5.9	25.0	25.3	31.2
VI Pittsfield	134	NRR*	1.5	NRR*	29.9	NRR*

Annalysis reveals that the frequency of the meetings of the local councils varied widely, ranging from bi-weekly to annually, with two respondents replying "as needed."

Although this sample does not match the Division's and is far too small to be statistically valid, the Council is unable to corroborate its finding with the Divisions's.

### Recommendation

That the Division, with the assistance of the State Advisory Council, provide greater technical assistance to local advisory councils in interpreting their role in the vocational education delivery system in the Commonwealth.

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\*NRR=No Returns Received from this Region.

K. Postsecondary Education

The Commonwealth of Massachusetts, and the Department of Education, as well as the State Advisory Council on Vocational Technical Education, have tended to view vocational education as being primarily within the province of the secondary education system. This view is not held by all states and, in fact, overlooks the valuable resource of community colleges and other postsecondary institutions.

If the Commonwealth is moving, as well as it seems to be, in the direction of an increasingly service and high skills-oriented work force, it makes sense for more federal occupational education monies to be put into postsecondary programs. Yet the 15% setaside for postsecondary education, which is the minimum allowable setaside, is viewed in this Commonwealth as the maximum. The formula according to which federal occupational education monies are now allocated to Community Colleges is in need of rethinking. It is based on the notion of subsidizing poorer institutions. But there is no such thing as a "poorer" community college, since community colleges derive no revenue from the cities and towns in which they happen to be located, but only from the state legislature. The introduction of a merit factor, in addition to "body counts," might be one avenue for consideration.

If it is assumed that the more sophisticated technical occupations require comprehensive education at the secondary level, with specific vocational skills training concentrated at the postsecondary level, then secondary schools have a responsibility to produce graduates who have solid academic skills, as well as generalized occupational skills. Students seeking access to technical and service occupations requiring postsecondary training need to be better prepared at the secondary level than they are now. Postsecondary education has tended to become a re-run of secondary education, with heavy emphasis on "basics" and on remediation. But delivering a program at a community college, or other postsecondary program, should be qualitatively different from delivering the same program to the same people in a secondary environment.

The need for vocational education is by no means limited to the secondary school age population; postsecondary institutions in general, and community college in particular, must be seriously considered as significant

contributors to the Commonwealth's vocational education delivery system. And entry-level training is not the only area of need. There is also a strong need for training for post-entry mobility. In an era when enrollments at the secondary level are declining and adult Americans make up an increasingly larger percentage of the population, the prudent response would be to augment allocations to that growing population.

Adult students run the gamut from immediate post-secondary age to post-retirement age. Some are in need of complete occupational skills training or re-training, some need skills upgrading and learning relevant to occupational advancement. It must be remembered that learning is a lifelong process. In a rapidly changing, highly technological society, one-time career choice and training make little practical sense.

- Joint Policy on Postsecondary Occupational Education

In May of 1977, the Board of Education and the Massachusetts Board of Regional Community Colleges (MBRCC) issued a joint policy statement on postsecondary occupational education in which they committed themselves to increasing the access to occupational education (and hence, the labor market) of those individuals and groups previously underserved by postsecondary institutions. After three years (in May, 1980), an evaluation study was undertaken by the Department of Educational Affairs of the MBRCC to review progress made in achieving the objectives of that policy with regard to federally funded vocational education grants awarded to Massachusetts Community Colleges by the Department of Education.

Specifically, the major Joint Policy objectives were:

- Access (Highest Priority): expanding access to all occupational education programs and the universe of occupational education, particularly for females, minorities, bilingual, disadvantaged, and handicapped students.
- Promotion of Guidance and Counseling: improved dissemination of career decision-making and labor market information; involving business, industry, union and labor expertise in helping students make career decisions; improved dissemination of information about Community College occupational opportunities; increased communication between Community Colleges and secondary schools.

- Provision of Support Services: outreach, basic skills training, counseling, and special services and equipment to promote access to occupational education by general and special populations (sub-services -- Objective H in the Joint Policy Statement).
- Collaboration, Articulation and Use of Community Resources: between secondary and collegiate institutions; between business, industry, and agencies; responding to the educational and economic needs of the Commonwealth.
- Promotion of Continuing Educational and Community Service: as defined in the Joint Policy Statement.\*

The primary vehicles for addressing the access objective (highest priority) of the policy were curriculum tailoring activities, pre-vocational activities and the creation of new degree programs. Females, minorities and special needs students were normatively well-represented in terms of percentages of total students served through these three policy-directed activities. (Of the total 18,156 students served, 65.3% were female, 18.5% were minorities, and 51.4% were students with special needs.)

Community College enrollments in engineering-technical and business career programs increased 17% and 6.4%, respectively, since the implementation of the Joint Policy, while enrollments in health career programs dropped 12.0%. Concomitantly, Department of Education funding of new career programs in high technology doubled from 1978-79 to 1979-80 and no Department of Education funds went to new degree program development in the area of health careers in FY '80.

The career program area where the greatest amount of new degree program development has occurred in the last three years has been the high technology area. In FY '80 (1979-80), 13 of the 38 grants awarded (27.1%) were for high technology degree programs. This grant award rate to high technology degree programs represented 29.8% of the total FY '80 Community College allocation. The new high technology degree programs developed at community colleges with Department of Education-awarded federal funds are not only meeting a pressing state need but are also meeting joint policy access objectives.

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\*Prepared by MBRCC-Educational Affairs.

Over 25% of all students in Department of Education-supported high technology community college degree programs are females and, in some instances, the proportion is as high as 55.0%. Similar outcomes are also observable in terms of minority and special needs students.

The greatest single expenditure of Department of Education-awarded funds, and one of the major joint policy promoting strategies employed by community colleges (FY '78 to FY '80), was curriculum tailoring activities. Of the total Department of Education funds spent in FY '78 to FY '80, 24.1% of the funds were spent on curriculum tailoring activities. The greatest amount of curriculum tailoring was in the form of the development of self-paced, individualized instructional materials and processes (41.8% of the total funds expended on this activity serving 70.6% of the total students served under this activity). The greatest amount of curriculum tailoring was done in the area of business career programs (59.7% of the total funds expended on this activity). The process of curriculum tailoring in the area of high technology has just begun and should be the major area of curriculum tailoring encouragement if this particular objective is pursued.

Pre-vocational activities represented the third largest area of Department of Education-awarded funds and expenditure of these funds (19.8% of all funds awarded). A variety of pre-vocational activities was employed by the colleges in both the Day School and the Division of Continuing Education, with 29.2% of all students served by Department of Education-awarded funds receiving pre-vocational services of some kind. The trend of Department of Education funding of pre-vocational activities at the community colleges has been in the direction of programs offering joint basic skills training and counseling.

No one can quarrel with the significance of the intent of the policy, or with the accomplishments it did achieve, but making it operational proved difficult. The statement contains no procedures for pursuing the policy; there are no provisions for joint decision-making; the primary mode of implementing Department of Education policy in the Community College system has been through the creation of new programs -- a strategy which cannot continue indefinitely; the Board of Education committed only federal resources to the Joint Policy. It appears that the scope of the policy was too global and too general.

With the dissolution of the MBRCC and the Board of Regents taking over, the time is opportune for the policy to be revamped and made more structured, including the establishment of a formal process for creating, developing, funding and implementing new degree programs.

It is clear that the Department is desirous of making something good of the Joint Policy. In the postsecondary sector there already exists a system to meet the pressing manpower needs of the Commonwealth for sophisticated training, without subverting the broader, more comprehensive educational process at the secondary level. If the State wants to utilize the Community College system, realistic cost factors must be taken into account. Given the kind of training the State wants to do, relative to sophisticated job areas, the existing Community College system is a valuable resource to be tapped.

## II. Employment & Training Needs

### A. Vocational Education, Employment and Training, and Economic Development

In preparing this Annual Report on vocational education and employment and training activities in Massachusetts during 1980, the Advisory Council is acutely aware that both the Vocational Education Act and the Comprehensive Employment and Training Act (the respective pieces of enabling legislation) are due to expire in FY 1982; in that same fiscal year, the Wagner-Peyser Act will be due for review and possible amendment.

Coupled with the current national and state economic situation, and the impending change of administration at the national level, these pending legislative debates take on added significance for Massachusetts, one of the nation's oldest industrial states, and for the country as a whole. What emerges from the Congress in the form of new vocational education and employment and training legislation in the next two years will have a major impact on the social and economic health of this nation during the 1980's, because vocational education no longer can be regarded as an educational program per se, but must now be viewed as an integral part of a total social and economic policy.

During 1980, Massachusetts has made significant progress toward the goal of linking educational and employment and training resources together for the purpose of addressing the State's needs for growing numbers of skilled workers, particularly in the rapidly growing high technology field. In so doing, the State has acknowledged that the economic development issue is one that involves a partnership between the public and private sectors, and that the solving of economic development problems will require a joint effort on the part of government, education, labor, and business and industry working together to develop and broaden the Commonwealth's skilled and professional work force to meet the emerging and expanding needs of business and industry. Such a joint effort will increase the availability of training and jobs for women, racial and linguistic minorities, older workers, the handicapped, and others who represent a willing and able group of trainees and workers.

## B. The Identification of Needs

The Bay State Project, which emerged in 1980 as the State's major new initiative in linking vocational educational and employment and training programs with the economic development needs of private industry, has served to focus attention once again on the urgent need for improving the collection and dissemination of accurate data on both the demand for skilled labor and the supply of trained workers. In past reports, the Advisory Council repeatedly has called attention to this need, particularly in terms of improving the capability of planning for future vocational and employment and training programs.

In the past year, the Massachusetts Occupational Information Coordinating Committee (MOICC), in cooperation with the Executive Office of Economic Affairs and Northeastern University, has made significant progress, not only in the coordination of efforts to produce better supply and demand labor market data, but also in the area of disseminating these data in a format usable by program planners and administrators.

An excellent example of the MOICC's coordination and dissemination activities was the publication in September of 1980 of a report prepared by the Policy and Evaluation Division of the Department of Manpower Development, entitled Efforts to Match Information on the Demand and Supply of Labor from CETA Skills Training Programs. This report, sponsored by the MOICC, marks the first time that accurate and current data on CETA training programs in the Commonwealth have been collected and combined with other existing data to develop a labor supply-demand source of information that will be useful, not only to CETA program planners, but also to vocational educators and to private industry.

The Advisory Council commends the MOICC (and its statutory agencies) for these coordinative efforts, and expresses the hope that, with the growing involvement of the private sector in such economic development activities as the Bay State Project, the availability of current and accurate labor market information and projections will be enhanced through the active participation of such groups as the Massachusetts High Technology Council, Chambers of Commerce, Private Industry Councils, etc. The Council hopes also that particular attention will be given by all parties to the collection, analysis and use of more accurate data on the needs for training and employment of women, racial and linguistic minorities, the handicapped,

and older workers, all of whom have been under-utilized in the past in promoting the social and economic health of the Commonwealth.

C. Comments on Reports of the State Employment and Training Council

The FY 1980 Annual Report of the Massachusetts State Employment and Training Council (SETC) presents a comprehensive review of employment and training activities conducted throughout the Commonwealth with federal, state and local funds amounting to \$600 million. These activities, which have included on-the-job and institutional skills training, vocational education, work experience, job development and placement, subsidized employment, and related supportive services, have been administered by a wide variety of public and private agencies and institutions. These organizations include community colleges, regional and local vocational-technical schools, vocational rehabilitation programs, public and private universities and colleges, state agencies such as the Division of Employment Security, prime sponsors under the Comprehensive Employment and Training Act, community-based organizations, labor unions, and various advocacy groups. Collectively, these agencies and institutions make up a coordinated and comprehensive employment and training system with the common goal of meeting the needs of employers in the Commonwealth and helping the State's citizens to become productive members of the labor force.

A year ago, the Advisory Council endorsed the SETC's goal of moving toward a functional approach in meeting the employment and training needs of the Commonwealth. During this past year, the SETC staff has been restructured in order to implement this functional approach to employment and training. The four (4) major divisions of the SETC staff under this reorganization are:

- The Administration Division, responsible for overall direction and coordination.
- The Policy and Evaluation Division, responsible for labor market research and information, follow-up and program evaluation, and legislative and policy issues.
- The Programs and Systems Development Division, responsible for planning, program development,

monitoring, grant management and dissemination of discretionary funds.

- The Balance of State Prime Sponsor Division, responsible for overall direction of the Balance of State CETA Program.

Each of these four functional Divisions is headed by a Staff Director who reports directly to the Assistant Secretary of Economic Affairs for Manpower Development. The Assistant Secretary, who was newly appointed in the spring of 1980, brings to his position a wealth of experience in program administration gained through many years of service in directing Model Cities, early manpower, and CETA programs at the local level.

In addition to its routine activities in coordinating statewide employment and training planning and operational activities, the SETC also has sponsored (in November, 1980) a statewide forum for representatives from private industry and the public employment and training system designed to promote closer cooperation between the public and private sectors. The theme of this joint meeting was: "The Employment and Training System; Serving Industry and Labor Needs through a Private/Public Partnership."

#### D. Coordination

The Advisory Council is pleased to note that the efforts of the SETC and the Department of Education to coordinate employment and training and vocational education activities, which have been gaining momentum during the two previous years, have continued during 1980, particularly in the implementation of activities under the State's Youth Action Plan. The CETA office within the Department of Education's Division of Occupational Education has continued to provide the main liaison point between the state's vocational education and employment and training agencies, but the cooperation and coordination between and among the two systems go far beyond this formal inter-agency link, as is evidenced by the active participation of members of the Board of Education and the Advisory Council staff in SETC activities, and the joint planning efforts by SETC and Department of Education staff under the umbrella of the Massachusetts Occupational Information Coordinating Committee.

During 1980, the Division of Occupational Education's CETA office updated and expanded its Index of Educational

Resources applied toward the Youth Action Plan which had first been compiled in 1979. The FY 1980 Index shows that an additional \$10 million in Federal funds (over the FY 1979 funding level of \$40 million) are now being applied to the implementation of youth programs, that shifts have been made in funding priorities by the Department of Education for FY 1980, and that there have been significant gains in interdivisional and interagency collaboration and cooperation during the past 12 months. The Council is particularly pleased to note that the Department of Education and the Department of Manpower Development have begun publishing a newsletter, LINKAGES, to facilitate the dialogue that will lead to collaborative action.

The Department of Education's interdivisional committee which developed the 1979 and 1980 Indices of Resources has now been converted into a standing task force of the State's Youth Council with the assignment of promoting even better interagency coordination in developing and disseminating information on federal, state, and local resources available for the planning and delivery of youth programs.

The Division's CETA office also has published a related report on program activities under the Governor's Special Vocational Education Grant (6%) as provided under Section 202 and 204 of Title II of the CETA Amendments of 1978.

An additional example of interagency coordination is the publication by the Division of Employment Security of a new series of labor area research reports (beginning in 1980) entitled Vocational Education and Workforce Planning Information.

The Advisory Council would like to see the role of the MOICC strengthened and expanded to serve as the focal point for even closer inter-agency coordination of efforts in collecting, analyzing and disseminating available data for use by all state and local agencies engaged in the planning and operation of vocational education and employment and training programs throughout the State.

### E. New Youth Legislation

A major effort was made at the national level during 1980 to follow-up on the Youth Employment and Demonstration Projects Act of 1977 (which expired officially in September 30, 1980) with major new youth employment and training legislation. Separate bills on youth employment were introduced in the U.S. Senate and the House, and the Vice-President's Task Force on Youth presented recommendations on new and expanded youth programs.

Massachusetts, which has the distinction of having developed and implemented the nation's first Youth Action Plan, took an active role in building on past experiences with youth employment programs and formulating new ideas for youth program initiatives for transmittal to Congressional Committees and the Vice-President's Task Force. The SETC's Youth Council and its Policy Subcommittee were both involved in these efforts. But the Congress failed to act on any of these youth legislative packages before adjourning, and the process of reauthorization of YEDPA (or the formulation of new legislation) awaits the new Congress in January of 1981.

The Advisory Council, in supporting the past efforts of the SETC in the area of youth programs, takes the position that the SETC, the Board of Education and the Advisory Council should continue to work together for the early passage of new youth employment legislation by the new Congress, and that this joint effort should be related to additional coordinated approaches to considering policy issues involved in the later reauthorization of the Vocational Education Act and the Comprehensive Employment and Training Act in FY 1982.

The work of the Junior Youth Council, a standing Committee of the State Youth Council made up entirely of youth 14-21 years old, deserves special mention. These young people have made valuable contributions to the effort to implement the Youth Action Plan; we support their specific recommendation that the business community be asked to become more directly involved in the area of career counseling for youth.

F. Status of MOICC

In its 1979 Annual Report, the Advisory Council recommended that the Massachusetts Occupational Information Coordinating Committee (MOICC) make maximum use of its limited staff and financial resources by concentrating on serving as the clearinghouse for the dissemination of occupational information collected by other state agencies, rather than trying to generate original data of its own.

The Council is pleased to note that, during this past year, the MOICC and its small staff has indeed focused its energies on achieving its primary role as the coordinator of the information-gathering efforts of its statutory agency members (the Executive Office of Economic Affairs, the Division of Occupational Education, the Division of Employment Security, and the Rehabilitation Commission), and the disseminator of occupational information in a format that is relevant and useful to vocational education and employment and training planners and program administrators.

The FY 1980 Report of the MOICC shows that significant progress has been made in the past twelve months in the areas of inter-agency coordination and of information analysis and dissemination, as follows:

- In conjunction with Northeastern University's Center for Labor Market Studies, the MOICC co-sponsored a conference for CETA prime sponsor research staff and local education agency curriculum planners on methods for conducting local employer surveys to obtain current occupational characteristics data.

- The development of training materials to facilitate the use of the new Standard Occupational Code System (SOC), and the field-testing of these materials at two training sessions for state and local CETA and educational agency staff.

- In conjunction with the Division of Occupational Education, the development of strategies for assisting LEAs to improve the use of available supply-demand occupational information in planning for vocational course offerings.

- Technical assistance to planning staff in the Division of Occupational Education, the Massachusetts Rehabilitation Commission, and the Regional Board of Community Colleges to identify sources of existing job market information and to determine ways in which such information can be made more useful to planners.

- Cooperation with the National Center for Educational Statistics in conducting a statewide survey of public and private postsecondary schools with occupational programs in order to provide current information on the supply of trained individuals entering the labor market for use by CETA and LEA vocational planners.

- Publication of a quarterly newsletter on MOICC activities and the information-gathering activities of its statutory agency members.

The Advisory Council notes that the resignation of the MOICC staff director in August of 1980 may have caused a temporary delay in the completion of the FY 1980 work plan that the Committee had set for itself, but hopes that, under new staff leadership, the MOICC will be able to maintain the positive forward progress it has made during the past year toward achieving better coordination of all state-level occupational information-gathering and dissemination activities performed by those agencies which provide information necessary to vocational education and employment and training program administrators and planners.

### III. Reauthorization of the Vocational Education Act

The federal Vocational Education Act (VEA) expires September 30, 1982. The U.S. Department of Education and the Congress have begun a process of re-examining both the broad issues involved in federal support for vocational education and the VEA's existing provisions. State Advisory Councils on Vocational Education are also examining the issues, and the following remarks constitute the Massachusetts Council's general position statement.

Vocational education is and should remain primarily a local\* option, subject to local control based on local needs. If it is to receive federal support, however, it must be able to demonstrate that it is helping to solve national problems of poverty, unemployment and under-employment; lack of equitable access to training and jobs; unequal educational opportunity; chronic inflation, and declining productivity. Therefore, the role of the federal government should be to provide incentives for local and state vocational education agencies to go beyond traditional courses and delivery systems in addressing national priorities.

The following goals should undergird the federal role in vocational education: a) eliminating discrimination because of race, sex, handicap or limited English language proficiency; b) reducing inter-state and intra-state disparities in financial ability to support quality education; c) protecting the rights of state and local governments, and public and private institutions, in the areas of educational policy and administration of programs; d) meeting industrial modernization needs; and e) providing the skilled labor force required to mount a major defensive effort in a national emergency. In pursuing these goals, the Congress should resist the tendency to design a piece of legislation that merely incorporates a series of compromises reflecting the self-interests of different constituent groups; rather, the new legislation should be the end product of a thoughtful assessment of the nation's needs, and a logically developed process that will enable vocational education to make its maximum contribution in meeting those needs.

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\*The term "local" denotes a local education agency.

Part of the reauthorization process should be a redefinition of vocational education, including a thoughtful, systematic appraisal of specific ways in which it can contribute to the national economic and social well-being. This Council's experience in Massachusetts reveals a curious paradox that is probably true nationwide. While school committees, school superintendents, vocational graduates, employees and the general public indicate a high degree of support for the concept of vocational education, many in Congress continue to be skeptical of vocational education's empirically verifiable contribution to reducing poverty and inequality. Moreover, it is still widely believed that vocational education is primarily for academically low-achieving students. Many parents -- especially minority parents -- fear having their children "tracked" into curricula which impart entry level skills for simple jobs with no future.

Even employers who express satisfaction with vocational education graduates are often critical of vocational education's performance in providing education and training for occupations requiring advanced or generalized skills and knowledge. The selective vocational schools, on the other hand, face a cruel dilemma: they are under great pressure to "stop creaming" and accept more students who, for one reason or another, cannot succeed in a straight academic curriculum, yet they are also criticized for not turning out more graduates in occupations requiring a high achieving individual. And the schools must confront this dilemma in a climate of fiscal austerity.

We recommend that the U.S. Departments of Education, Commerce and Labor convene a national conference to discuss the entire question of vocational education in the United States, in light of the educational, economic and social issues of the 1980's. Such a conference should have the following minimum agenda:

1. A realistic evaluation of where vocational education is now with respect to: a) past expectations, b) areas of success to be strengthened, and c) the program development process.
2. An assessment of the entire education process, from pre-school age on; the goal should be to relate vocational education to all education,

toward the end of enriching the educational experience for students without sacrificing the possibility of concentrating in a specific area they may choose.

3. An examination of what universal education should mean, practically and functionally. How can the college-bound student be allowed the advantage of choosing some vocational courses, and the non-college bound some liberal arts courses, so that options remain open, and the academic, esthetic, and creative talents of the young are encouraged to develop?

### Specific Recommendations to the Congress

1. The new federal law should provide greater incentives for the vocational education system to teach "emerging occupations." The vocational education system is still too rigid and tends to offer the same kinds of skill training it always offered. Too many vocational educators seem unaware of their part in the total employment and training system and, in general, our educational institutions do not react fast enough to labor market changes. The vocational education record of planning for labor market needs has been unimpressive, although real progress is underway.

In order to enhance the role of vocational education in serving new and emerging needs, we recommend expanding the purposes identified in Section 101 of the Vocational Education Act to include the providing of assistance to individuals and business organizations toward the end of improving productivity in the United States. Additional concepts and funding to support this goal should be inserted throughout the Act.

The Congress should also consider reserving substantial funding for new facilities and equipment, on a multi-year basis, when a state can demonstrate direct ties between its vocational education system and economic development plans.

2. The new federal legislation should allocate more money and encouragement to vocational exploration. Such exploration should start in the elementary grades, and should have as its two primary goals the broadening of youngsters' horizons as to what career options are available,

and the strengthening of the conviction that individuals can control their own occupational destinies. These goals are especially important for disadvantaged minority students, handicapped students and young women. Entrepreneurship should be stressed, so that students are not too quick to assume that the world of work means working for someone else. We should not be reluctant to address such topics as the dignity of work, contributing to society, and shaping one's own career, even at the elementary school level.

3. The new federal legislation should do a better job of bringing about CETA/vocational education coordination and cooperation. Although cooperation at the state level is impressive (in Massachusetts), collaboration between the CETA and education establishments can be successful only if it is accepted at the local level. Financial incentives alone are not sufficient to push beyond the rudimentary stage of cooperation achieved thus far. Difficulties inhibiting cooperation that need to be solved include different planning cycles, funding uncertainties, differing lines of authority and accountability, organizational instability in CETA, differing constituencies, the awarding of academic credit for work experience and CETA's strong emphasis on skill acquisition and job placement.

4. The new federal legislation should mandate the establishment of, and provide special funds for, a permanent civil rights unit within the state vocational education structure. Such a unit would be responsible for administering the Vocational Education Guidelines promulgated by the Office of Civil Rights. It is needed because the evidence is that persons of a particular race, ethnicity or sex, or handicapped persons, are still far short of having equal access to quality vocational training leading to careers in primary labor markets.

5. The term "disadvantaged" needs to be defined uniformly across state and federal programs and the new federal legislation should also refer specifically to "disadvantaged Blacks." The Council believes that the descriptor "Black" must be used to emphasize the unique problems of racism affecting people in this category. The legislation should also refer to "minorities of both sexes" and to "women of all ethnic groups."

6. The new federal legislation should require substantial funding for basic literacy and computational skills in order to better serve disadvantaged secondary age youth. Numerous studies suggest that much of the difficulty disadvantaged youth have in finding decent jobs arises from unsuccessful experience in schooling; they simply lack the basic literacy and computational skills employers expect in new employees. The evidence also suggests that basic education is often best taught when linked in the students' minds with the likelihood of success in the job market.

7. The federal mandate under the Vocational Education Act is not matched with a commensurate amount of federal dollars. The Council calls for full funding up to the amounts authorized.

8. The legislative intentions of the VEA are sound -- the Act does not need a radical rewrite -- but there is a real problem of accountability among agencies responsible for its implementation. We have not planned on the basis of job opportunities but the existing law is flawed because it mandated the use of labor market data and its development simultaneously. We still badly need follow-up information on graduates. The new federal law should reinforce the roles of NOICC and SOICC.

9. The new federal legislation should provide more specific guidelines for the Accountability Report. Although the data on what actually happens to programs are available, the states do not use this data to assess differences between planned and actual outcomes.

10. The evaluation sections of the federal legislation and regulations need to be clarified and strengthened. The VEA should stipulate that it is the state's responsibility to evaluate and the State Advisory Council's responsibility to review and comment on: a) the evaluation process, b) results of evaluation, and c) use made of evaluation results.

11. The planning group, under Section 107 of P.L.94-482, has functioned well enough and should not be changed significantly, except to guarantee that priority populations are represented. The Council sees real progress in the Massachusetts State Department of Education's willingness to engage in planning activities, and is encouraged by the movement toward greater emphasis on local level planning.

There is a real question, however, as to whether or not it is realistic to expect all states to conform to a national model of what a state plan should look like.

12. The new federal law should be more specific concerning the relationship between state and local advisory councils. The law indicates no limit to the range of "technical assistance," nor does it provide for funding of such assistance. Local advisory councils can and do play a valuable role in planning, evaluation and job placement. State Advisory Councils should be reimbursed for technical assistance, on a cost recovery basis.

13. State Advisory Councils on Vocational Education should be retained, along with the categories of representation specified in Section 105(a) of the VEA. SACVEs guarantee citizen participation in the policy-making process, and represent the interests and concerns of those who are the potential "consumers" of vocational education. Operating autonomously, SACVEs can assume a leadership role in the difficult years ahead, as the vocational education system is asked to help meet the challenge presented by social, economic, technological and demographic changes requiring new programs, along with the elimination of outmoded ones. As concern with the cost-effective expenditure of public funds increases, those most in need of services and programs must have a voice in the setting of priorities. All citizens must be able to evaluate the effectiveness of the programs their tax dollars are supporting. Therefore, SACVEs are more important than ever.

IV. Progress Made On Advisory Council's FY 1979  
Recommendations to the State Board

Recommendation #1 - Data

That the Department of Education develop and implement a written plan, with goals and time-lines, for improving the efficiency of its procedures for collecting, processing and disseminating vocational education data.

Consideration:

In response to the Advisory Council's recommendation for improving the efficiency of its procedures for collecting, processing and disseminating vocational education data, the following written plan, with goals and time-lines, is proposed.

The Division of Occupational Education will present to the Division of Administration and Personnel, the necessary information to incorporate all vocational education data collection as part of existing Departmental data-reporting forms. This will be done in stages in order to accommodate the workloads of each Division and to correspond to the time-lines for collection and the dates due for federal, state and local reporting and dissemination documents. The following goals and time-lines are proposed:

Goal 1 - Incorporate the collection of vocational education financial data as part of the End-of-Year Pupil and Financial Report to be effective as of July 1, 1980. This will reduce reporting requirements for local schools, consolidate financial reporting systems, improve the accuracy of the data.

Goal 2 - Incorporate the collection of vocational education enrollment data, detailed in a manner to suit planning, reporting and evaluation needs, as part of the Fall Statistical Reports, to be effective as of October 1, 1980. This will reduce reporting requirements for local schools, eliminate conflicting reports, allow the Department the time to improve vocational education enrollment data.

Goal 3 - Incorporate the collection of vocational education follow-up data as a part of the first-of-the-

year reports, to be effective as of January, 1981. This goal must remain somewhat flexible because of the complications in attempting to consolidate census and follow-up reports.

Recommendation #2 - State Plan Specificity

That the Department of Education amend the State Plan for Vocational Education, to make it more specific with respect to goals, objectives, criteria for evaluation, and the planning role of local education agencies.

Consideration:

Beginning with the new planning cycle for fiscal years 1981 and 1982, the local education agencies are now required to develop a more sophisticated Local Plan for Occupational/Vocational Education. This plan, including a general assessment, will enable the Department of Education to develop goals and objectives which are derived from established and documented need at the district level. The new Application for Public Law 94-482 funds and the respective instructions contained in the Local Planning Booklet offer the schools more definitive methods for evaluating programs. Detailed objectives along with concomitant learning activities and indications of time spent in such activities will be specified for each proposed project in the Application. Furthermore, the objectives chosen for evaluation, as well as time-lines for the administration of evaluative instruments, also will be included in the Application. Finally, the planning role of local education agencies is more clearly defined both in the Local Planning Booklet and the Local Plan document.

Recommendation #3 - Disadvantaged Racial and Linguistic Minorities

That the Department of Education set forth in the State Plan for Vocational Education specific suggestions for delivering secondary and postsecondary vocational programs to disadvantaged racial and linguistic minorities.

Consideration:

The fiscal year 1980 Annual Program Plan for Vocational Education has made definite strides to detail strategies to increase access for disadvantaged racial

and linguistic minorities to vocational programs. This aspect of access is an important part of the Annual Admissions Update process and the implementation of the Office for Civil Rights guidelines for vocational education. In addition, the staff of the Division of Occupational Education has provided increased technical assistance to school districts to more adequately serve these students so that there may be more effective use of Public Law 94-482 funds for vocational programs for disadvantaged racial and linguistic minorities. It should be noted that Boston's \$38 million Hubert H. Humphrey Occupational Resource Center will begin serving a greater number of disadvantaged and linguistic minorities in September, 1980.

The staff of the Division of Occupational Education will continue to work with the State Advisory Council to identify methods to enable these students to have greater access to better vocational programs and services.

#### Recommendation #4 - Correctional Institutions

That the Board of Education encourage Regional Vocational Schools and Community Colleges to participate in the delivery of vocational training programs conducted inside correctional institutions.

#### Consideration:

For many years the Board of Education has supported vocational education programs in correctional institutions. For fiscal year 1980, approximately \$400,000 has been awarded to develop and support vocational programs for the incarcerated and for youthful offenders. The Division of Occupational Education has worked with both CETA and the Division of Youth Services to develop working relationships with the schools so that youthful offenders may have access to local educational opportunities. The Division has offered technical assistance to the Massachusetts Correctional Institutions in improving vocational education for the incarcerated and to develop plans to increase services. Already there are several vocational programs in correctional facilities which are conducted by public educational institutions.

The Department of Education acknowledges this recommendation from the State Advisory Council and will pursue the task of investigating the feasibility of encouraging more schools to participate in the delivery of vocational training programs conducted inside correctional institutions.

Recommendation #5 - Local Advisory Councils

That the Department of Education organize and conduct, with the State Advisory Council on Vocational-Technical Education, at least one Statewide workshop for Local Advisory Councils in 1980.

Consideration:

The Massachusetts Board of Education for the past several years has notified eligible recipients within the Commonwealth of the responsibilities of such recipients of Public Law 94-482 funds to establish Local Advisory Councils in the manner and for the purposes legislated by this law. The Department of Education has required all eligible recipients to submit Local Advisory Council membership lists in order to verify compliance. For the fiscal years 1981 and 1982 funding process, the Department of Education has required each eligible recipient to develop a Local Plan for Occupational/Vocational Education. This Local Planning document reiterates the federal requirements and clearly instructs the eligible recipient as to the best use and composition of such councils. Table 1 of the document is a membership list which delineates composition and representation. The Department of Education has assisted the State Advisory Council in the dissemination of the questionnaire to determine the make-up and perceived functions and needs of Local Advisory Councils. The Department of Education is interested in assisting the State Advisory Council in the development of a Handbook for Local Advisory Councils by reviewing and commenting on drafts of the Handbook. Finally, the Department of Education, continuing its support for improving the effectiveness of Local Advisory Councils, endorses the State Advisory Council's call for at least one Statewide workshop for Local Advisory Councils in 1980. Since the State Advisory Council has a mandate to provide technical assistance to eligible recipients and to the Local Advisory Councils, upon request by the recipients, the work-

shop(s) should be based on the above-mentioned needs assessment questionnaire, be timed to correspond to the next year's planning process, include the involvement of the CETA Area Manpower Advisory Committees, and may be a forum to introduce the above-mentioned Handbook.

#### Recommendation #6 - Coordination with CETA

That the Department of Education provide increased technical assistance to vocational educators and CETA program operators, at the local level, in implementing the policy-making agreement entered into by the Board of Education and the State Employment and Training Council.

#### Consideration:

The Department of Education is making every effort to implement the Governor's Policy on Youth Employment and Training and the Governor's Youth Action Plan. These documents have been given to every school system in the Commonwealth. In addition, workshops on CETA were given for Division of Occupational Education staff. Numerous interdepartmental meetings and briefings have been held for CETA Education coordination in general and the Youth Action Plan in particular. Central and regional education staff have given much technical assistance to vocational educators on collaboration with CETA. It should be noted that no administrative funds for CETA Youth technical assistance purposes are given to the Department of Education at this time. In order to adequately increase technical assistance to vocational educators and CETA program operators in implementing the Youth Action Plan, a portion of the Governor's CETA Youth administrative funds must be set aside for the Department of Education, particularly the Division of Occupational Education. The Local Plan for Occupational/Vocational Education requires each eligible recipient of Public Law 94-482 funds to describe plans in relation to the Governor's Youth Action Plan.

#### Recommendation #7 - Planning

The Board of Education should define clearly the role of local education agencies and other agencies in achieving the objectives of the State Plan for

Vocational Education, and should provide increased technical assistance to local education agencies in order to enhance and improve their planning capabilities.

Consideration:

The first four pages of the Massachusetts Annual and Five Year Plan for Vocational Education clearly emphasize the importance of local planning. One of the major objectives of the Five Year plan was to "improve the planning process for addressing regional, state and federal priorities for vocational education and manpower services based upon local needs assessment data." At the present time, every eligible recipient must complete a Local Plan for Occupational/Vocational Education. Through this unique instrument, a general needs assessment and planning strategies are expressed by each school district. This information will become part of the State Plan and a source for goal articulation. The local education agencies have received comprehensive technical assistance in understanding and completing the Local Plan.

Recommendation #8 - Guidance and Counseling

With reference to its May, 1978 Position Paper on Guidance and Counseling, the Board of Education should give careful consideration to the recommendations voiced by students at the Council's Student Forum held in Springfield, in March, 1978.

Consideration:

In order to clarify the position of the Board of Education regarding the Council's Student Forum recommendations, the Board acknowledges the comments from the Springfield area students. At this time there is no opportunity to reflect this acknowledgement in the May, 1978 Position Paper on Guidance and Counseling. However, several of the recommendations can very well be addressed by including them in next year's edition of the Local Planning Booklet's federal program category requirements for Vocational Guidance and Counseling.

For example, the Local Planning Booklet currently

has no specific references to team counseling or group sessions in career guidance, as recommended by the Springfield students. These methods can very easily be introduced as viable options for schools to improve vocational guidance and counseling services through the use of Public Law 94-482 funds.



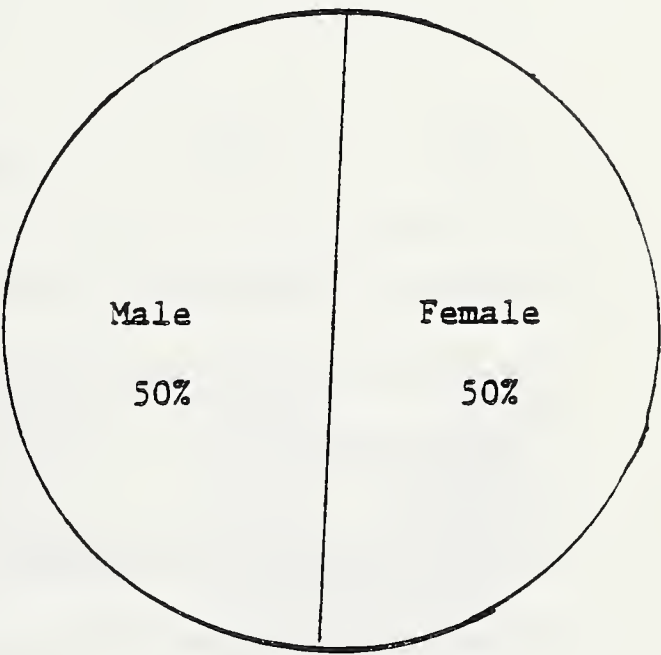
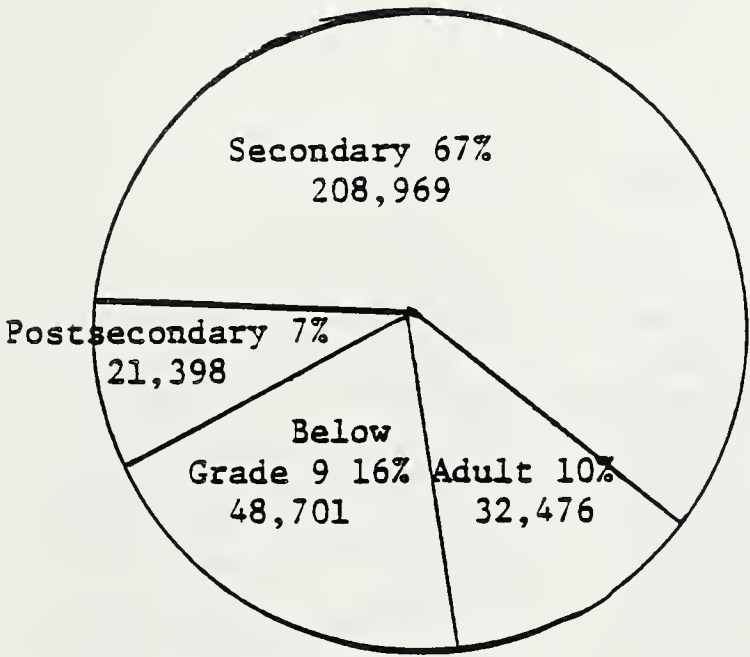
## APPENDIX A

### DATA



TABLE I

Massachusetts Enrollment In  
Public Vocational Education Programs: FY 1979  
(Federal definition)



	Percentage	Number
Secondary	67%	208,969
Post Secondary	7%	21,398
Adult	10%	32,476
Below Grade 9	16%	48,701
Total Enrollments		311,544
Disadvantaged	9%	27,870
Handicapped	5%	15,177
Limited English Proficiency	.2%	695
Cooperative	1.4%	4,320

SOURCE: Massachusetts Department of Education, Division of  
Occupational Education

TABLE II

Massachusetts Enrollment in  
Public Vocational Education Programs: FY 1979  
(Federal definition)

	Total	Male	Female
Agriculture	3,564	2,227	1,337
Distribution	10,707	4,795	5,912
Health	8,636	1,013	7,623
Non Occupational Consumer/ Homemaking	43,036	10,754	32,282
Occupational Prep. Consumer/ Homemaking	4,070	839	3,231
Office	95,449	26,327	69,122
Technical	7,341	6,147	1,194
Trade & Industry	55,779	47,715	8,064
Industrial Arts	73,107	51,651	21,456
Other	9,855	5,479	4,376
TOTALS	311,544	156,947	154,597

SOURCE: Massachusetts Department of Education, Division of  
Occupational Education

TABLE III  
Enrollments in Vocational Education By  
Level and Target Group  
Fiscal Years 1975-1979

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Total	199,064	214,946	273,874	241,822	311,544
Secondary	148,496	155,106	214,113	192,968	208,969
Post Secondary	19,691	22,562	25,409	18,832	21,398
Adult	30,877	37,278	34,352	30,022	32,476
Below Grade 9	N/A	N/A	N/A	N/A	48,701
Disadvantaged	(11,618)	(15,961)	(19,062)	(16,623)	(27,870)
Handicapped	(1,946)	(2,772)	(5,015)	(6,431)	(15,177)
Limited English Proficiency	N/A	N/A	N/A	N/A	(695)

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FY 1979 Estimated Secondary Racial/Ethnic Enrollment

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Native American	Asian	Black Non-Hispanic	Hispanic	White Non-Hispanic
128	750	9,702	5,490	192,902

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SOURCE: Massachusetts Department of Education, Division of  
Occupational Education

TABLE IV  
Enrollment By Vocational Programs: 1977-79  
Massachusetts

	<u>1977*</u>	<u>1978**</u>	<u>1979</u>
Total (unduplicated)	273,874	241,822	311,544 ***
Agriculture	3,946	3,865	3,564
Distribution	9,275	9,297	10,707
Health	9,883	8,678	8,636
Non-Occupational Consumer/ Homemaking	29,385	27,961	43,036
Occupational Prep. Consumer/ Homemaking	5,108	5,648	4,070
Office	90,277	88,322	95,449
Technical	6,271	7,196	7,341
Trade & Industry	58,812	55,729	55,779
Industrial Arts	N/A	N/A	73,107
Other	N/A	N/A	9,855
Special*	60,467	35,216	N/A

\*1977 includes 33,574 below grade 9, mostly in Industrial Arts

\*\*1978 includes only 11,371 below grade 9, again, mostly in Industrial Arts

\*\*\*duplication may occur in Consumer Homemaking and Industrial Arts

Special Programs include: Group Guidance, Pre-Postsecondary, Remedial, Industrial Arts, Volunteer Firemen, Other (not elsewhere classified)

SOURCE: Massachusetts Department of Education, Division of Occupational Education

TABLE V

FUNDING TO MEET PROGRAM (PURPOSE) NEEDS  
F.Y. 1980 (estimated)

Program/Purpose	Total Funds	Federal Funds	State and Local Funds
SECTION 120 - Basic Grant	\$243,025,187	\$12,105,187	\$230,920,000
Vocational Education	174,570,187	9,570,187	165,000,000
Cooperative Programs	2,400,000	400,000	2,000,000
Construction	45,000,000	-0-	45,000,000
Sex Bias Personnel	60,000	60,000	Incl. in Admin.
Industrial Arts	18,755,000	755,000	18,000,000
Interagency Industry Specific Trng.	200,000	200,000	Incl. in Voc. Ed.
Special Services (Homemakers)	200,000	200,000	Incl. in Voc. Ed.
Administration and Supervision	1,840,000	920,000	920,000
SECTION 130 - Program Improvement and Support Services	9,091,777	2,861,777	6,230,000
Research	300,000	300,000	Incl. in Admin.
Exemplary and Innovative	422,213	422,213	Incl. in Voc. Ed.
Curriculum Development	250,000	250,000	Incl. in Admin.
Vocational Guidance	7,059,564	1,059,564	6,000,000
Personnel Training	400,000	400,000	Incl. in Admin.
Overcoming Sex Bias	200,000	200,000	Incl. in Voc. Ed.
Administration and Supervision	460,000	230,000	230,000
SECTION 140 - Special Programs for the Disadvantaged	508,832	508,832	Incl. in Voc. Ed.
SECTION 150 - Consumer and Homemaking Education	8,256,633	1,106,633	7,150,000
Economically Depressed Areas	5,500,000	500,000	5,000,000
Educational Programs in Other Areas	2,456,633	456,633	2,000,000
Administration	300,000	150,000	150,000
SECTION 121(d) - Planning and Evaluation	127,208	127,208	Incl. in Admin.
TOTAL	261,009,637	16,709,637	244,300,000

Source: Massachusetts Annual Program Plan For Vocational Education,  
Fiscal Year 1980, p. 28.

TABLE VI

Fiscal Year 1980  
Estimated Allocation of Funds  
for State Vocational Education Programs

PROGRAM/PURPOSE	TOTAL FUNDS	FEDERAL FUNDS	STATE & LOCAL FUNDS
Set-asides			
Handicapped	\$18,500,000	\$1,500,000	\$17,000,000
Disadvantaged(excluding Limited English- speaking ability)	12,750,000	2,750,000	10,000,000
Limited-English speaking	1,750,000	250,000	1,500,000
Postsecondary and Adult	42,250,000	2,250,000	40,000,000
TOTAL	\$75,250,000	\$6,750,000	\$68,500,000

SOURCE: Massachusetts Annual Program Plan For Vocational Education,  
Fiscal Year, 1980, p. 29.

APPENDIX B

EXCERPTS FROM  
THE COMMONWEALTH OF MASSACHUSETTS  
ANNUAL ACCOUNTABILITY REPORT  
FOR  
VOCATIONAL EDUCATION FY 1979



## Massachusetts Vocational Education

### ACCOUNTABILITY REPORT FOR FISCAL YEAR 1979

#### 7.0 Programs for Fiscal Year 1979

##### OVERVIEW

The Massachusetts Vocational Education Accountability Report for Fiscal Year 1979 responds to the reporting needs of the United States Office of Education and the citizens of the Commonwealth relative to the use of federal funds under Public Law 94-482 and its relationship to other Massachusetts occupational education programs and services during fiscal year 1979.

Public Law 94-482, Title II, Vocational Education, placed new responsibilities on state agencies and school systems which brought an increased emphasis to planning and program services for special populations. At the same time considerable flexibility was offered to states in developing a planning document which would best express the needs of students and the programs in which the students would be served over a five-year period.

The outline for the Accountability Report is based on elements for which the Commonwealth is accountable to the Federal Government. These elements are derived from the final Rules and Regulations published in the Federal Register on October 3, 1977.

In reviewing the Accountability Report for 1979, the reviewer should consider the following:

1. The Massachusetts Board of Education developed an equitable formula for the distribution of federal funds, as compared to the strict state-wide Request for Proposal competitive approach used in distributing federal vocational education funds in past years. The amount of funds carried over from fiscal year 1978 which were included in the resultant formula approved for fiscal year 1979 is accounted for in this report (approximately \$5.5 million).
2. The time limit for the use of federal funds is actually two fiscal years. Consequently, the balance of fiscal year 1979 federal funds not accounted for in this document will be reported in the fiscal year 1980 Accountability Report.

##### Selected Activities in Vocational Education During Fiscal Year 1979

The use of Public Law 94-482 funds for vocational education combined with state and local funds produced many model programs for the handicapped, disadvantaged and limited English speaking. Emphases were

placed on expanding access to regular vocational education programs, orientation and pre-vocational programs and supportive services to enable students to succeed in skills training. Postsecondary educational institutions expanded program options for these same populations.

During fiscal year 1979, the following activities were undertaken:

#### Displaced Homemakers

The first programs for Displaced Homemakers were awarded and begun during 1979 using the carryover 1978 Displaced Homemaker funds as well as the 1979 setaside. A total of \$256,746 was awarded for six programs serving approximately 500 persons. These programs ranged from primarily support services to intensive skills training, from a single to many occupational program offerings, from strictly clerical skills training to preparation for careers in the electronics industries. The training was conducted by four Community Colleges, one Regional Vocational Technical High School and one private non-profit vocational education institution.

The launching of these programs was clearly an interagency effort using the expertise of several state agencies and interest groups to advise on the design of a program model and a thorough review of grant applications.

#### Interagency Industry Specific Training

Another innovative program area was begun in 1979: Interagency Industry Specific Training. Seven programs were funded for a total of \$231,753 to train 187 persons. In this instance, three Regional Vocational Technical Schools, two Comprehensive Schools, one City Trade School and one Community College were selected to offer the programs. These programs were designed to provide short-term training to meet employer needs, responding to identified industries' requests for trained personnel.

The Massachusetts Department of Commerce and Development assisted school districts in contacting industries and assessing company needs. The programs were open to CETA eligible persons and recruitment sources included the Division of Employment Security and the local CETA program.

#### Programs to Encourage Equal Access

In fiscal year 1979, the Division of Occupational Education awarded a grant to Shawsheen Valley Regional Vocational Technical School to design, develop and implement a program entitled, "Project Option - Opening People to Increasing Opportunities Now." The goals of the program were sixfold: to reduce the influence of sex role stereotyping on students' career choices, to promote sex-fair and sex affirmative

teaching strategies and programs, to increase female enrollment within the school district, to increase the number of students choosing non-traditional vocational programs, to increase student, parent, educator and employer awareness of the negative consequences of sex bias and stereotyping and to involve representatives from each town in the district in a collaborative effort toward reducing sex bias and stereotyping in vocational education.

Selected follow-up activities included:

#### Affirmative Recruitment Efforts

Students from non-traditional shops will continue to meet with eighth graders in order to provide them with role models.

#### Workshops for Counselors

Consultant will be hired to conduct a series of workshops for middle school counselors in the district to provide strategies for using non-sexist materials with their students.

#### Support Group

The Guidance Department will continue to offer a support group for students in non-traditional programs. All students enrolled in these programs will be invited to join.

#### Professional Development Programs

The preparation of Bilingual Vocational Instructors is a continued priority with the Division of Occupational Education. Through a grant from the Division of Occupational Education to Fitchburg State College, the program has trained 50 Spanish speaking instructors and 25 Portuguese speaking instructors in diverse occupational areas.

As a result of efforts, in large part, by project staff, problematic teacher approval issues, dealing with information documentation, citizenship, licensing of bilingual instructors, have been resolved.

Finally, the Massachusetts Board of Education has passed an official bilingual vocational approval classification. The new approval card includes "bilingual" as an additional category so that "bilingual vocational instructor" will have an administrative definition.

In other programs during fiscal year 1979, the following was accomplished:

Funded Massachusetts Institute of Technology to provide staff development program for teachers in Aviation Technology, Computer Science, Electronics, Environmental Protection and Medical Technology.

Established vital links with the New England Association of Schools and Colleges to coordinate evaluation of occupational programs in school districts throughout the Commonwealth of Massachusetts.

Funded three programs which were designed to train interdisciplinary teams to work together as a unit in conducting diagnostic vocational evaluations of students with special needs.

Initiated a joint planning group between the Divisions of Special Education and Occupational Education aimed at ultimately coordinating federal funds for occupational programs for students with special needs.

Provided \$270,000 for a staff development and curriculum development program for the Boston Public Schools to train technical curriculum specialists for the new \$38 million Occupational Resource Center that is currently under construction in the City of Boston.

Provided funds for the development of vocational audiovisual instructional units to be disseminated to schools throughout the state.

# 7.1 Use of Funds to Meet Program Needs

The goals and objectives for the following programs meet federal and state guidelines and the stated use of funds as directed in the Massachusetts Annual and Five Year State Plan. The planned use of funds under the Act for Fiscal Year 1979 has not changed from what had been presented in the Massachusetts Annual Program Plan for Fiscal Year 1979.

## Basic Grant Programs (Section 120)

State/Local Estimated Expenditures	P.L. 94-482		P.L. 94-482		P.L. 94-482	
	F.Y. 1979	Awarded During F.Y. 1979	Reported as Expended from 7/1/70 thru 6/30/79	F.Y. 1978 Funds	F.Y. 1979 Funds	Reported Expenditures Thru 6/30/78
	6	5,909,324	6	1,057,556	\$	903,695
		2,575,176		2,517,899		2,072,433
		868,904		128,467		11,317
		36,811,963		1,953,722		1,421,057
		113,049,247		2,638,023		951,241
		3,070,366		405,051		245,874
		35,000,000				
		20,751,678		1,341,208		474,780
		(Incl. PS/Adult)		205,352		100,000
		(Incl. PS/Adult)		72,191		
		(Incl. Admin.)		50,000		
		5,183,898				
		699,926		971,890		

## Program Improvement and Supportive Services (Section 130)

Exemplary/Innovative	121,680	87,994	195,292	214,685	12,816
Curriculum Development		304,166	60,270	78,200	39,730
Research		271,311	52,437		
Guidance/Counseling	6,086,910	839,018	655,767	826,826	190,211
Personnel Training	11,609	571,005	278,117	219,432	21,883
Sex Bias Grants	69,055	37,654	34,474	47,282	11,660
State Administration	174,982	242,972		293,200	293,200
<b>SUB-TOTAL</b>	<b>6,464,236</b>	<b>2,354,120</b>	<b>1,276,357</b>	<b>1,679,625</b>	<b>569,500</b>

## Special Programs for the Disadvantaged (Section 140)

Disadvantaged		317,990	230,634	320,534	54,329
<b>SUB-TOTAL</b>		<b>317,990</b>	<b>230,634</b>	<b>320,534</b>	<b>54,329</b>

## Consumer and Homemaking Education (Section 150)

Non Economically Depressed Areas	3,962,052	125,680	75,267	44,607	21,083
Ancillary	61,500		17,000		
Economically Depressed Areas	10,499,439	685,303	405,352		
Ancillary	163,187		17,000		
State Administration	35,000	150,000		100,000	100,000
<b>SUB-TOTAL</b>	<b>14,721,258</b>	<b>960,983</b>	<b>514,619</b>	<b>144,607</b>	<b>121,083</b>

<b>GRAND TOTAL</b>	<b>\$245,105,976</b>	<b>\$15,774,452</b>	<b>\$8,262,007</b>	<b>\$8,471,756</b>	<b>\$3,536,321</b>
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7.2 Fiscal Accountability

A. Estimated State Administrative Costs

	<u>Federal</u>	<u>State</u>	<u>Purpose</u>
Section 120	971,890	699,926	General administration. Central and Regional Technical Assistance for Vocational Education Programs at local schools.
Full Time Sex Equity (Personnel)	50,000	(part of above)	Activities to eliminate sex discrimination and sex stereotyping
Section 130	242,972	174,982	Data collection, evaluation of local program planning RCU administration
Section 150	150,000	35,000	Technical assistance to local schools.
	<hr/>	<hr/>	
TOTAL	\$1,364,862	\$909,908	

B. Local Administrative Expenditures

Local administrative costs for local vocational education programs, including administration, planning and evaluation activities is estimated at \$5,183,898. Community College administrative expenditures are not included.

Fiscal Year 1979  
Estimated Local  
Administrative Costs

Section 120	
Section 130	
Section 140	
Section 150	\$5,183,898

- C. Programs and activities supported in whole or in part by state and local funds used to match federal funds and for maintenance of effort purposes have met the same conditions and requirements as those supported by federal funds.

<u>Estimated F.Y. 1979 State/Local Expenditures</u>	<u>Laws/Regulations/Policies Governing Use of State/Local Funds in Accord With Federal Conditions &amp; Requirements</u>
Full-time Occupational Day 129,520,773	General Laws: Chapters 15, 70 and 74 Board Policy on Occupational Education
Community Colleges 32,500,000	Joint Policy on Occupational Education
Construction of Vocational Facilities 35,000,000	Chapter 71B
Handicapped Vocational 5,909,324	Chapter 766 and Board Policy
Limited English Proficiency 864,904	Chapter 71A and Board Policy
Consumer and Homemaking 14,461,491	Chapter 70 and Board Policy
Industrial Arts 20,751,678	Chapter 70 and Board Policy
Administration <u>6,093,806</u>	
TOTAL \$245,105,976	

- D. In-kind contributions were not used as part of the state matching and maintenance of effort requirements.

\$245,105,976 is the estimated fiscal year 1979 state and local expenditure for vocational education in the Commonwealth of Massachusetts used as matching and maintenance of effort requirements.

- E. As of June 30, 1979, 7.3% of the FY 1978 set-a-side for disadvantaged was expended for limited English proficiency. The Annual and Five Year Plan estimated the limited English proficiency population (ages 15 to 24) to be between 1.3 and 1.5% of the total population. Additional limited English proficiency students were served with Special Disadvantaged Section 140 funds.

P.L. 94-482 FY 1979 Funds  
Disadvantaged/LES  
Expenditures 6/30/79

\$334,438  
100%

Limited English Proficiency  
Expenditures  
June 30, 1979

None Reported

Total FY 1978 Funds  
Expended thru 6/30/79  
Disadvantaged/L.E.P.

\$2,636,999  
100%

Limited English Proficiency

\$192,551  
7.3%

State/local LEP expenditures for FY 1979

\$868,904  
25.2%

State/local Disadvantaged/L.E.P. for FY 1979

\$3,444,080  
100%

- F. Maintenance of Effort: Total state/local expenditures are maintained at a level nearly equal to the previous year.

Estimated  
State/Local  
Expenditures  
FY 1979

\$245,105,976

Estimated  
State/Local  
Expenditures  
FY 1978

\$251,769,206

### 7.3 GOAL ACHIEVEMENT - USE OF FUNDS TO MEET EMPLOYMENT NEEDS

#### Preliminary Statement

The general goals of the Massachusetts Annual and Five Year State Plan for Vocational Education, as listed below, were adequately addressed during Fiscal Year 1979:

- I. Provide equal access to programs for a greater number of youths and adults especially those underserved.
- II. Improve procedures for delivering vocational education.
- III. Provide a comprehensive system of administration to manage resources and organize the delivery system of vocational education.

A. Use of funds in terms of programs, enrollments, educational levels, types of institutions and costs.

#### i. Program Enrollments (by O.E. Code)

An assessment of enrollment data reported by school districts for fiscal year 1979 (school year 1978-1979) indicates an overall increase in enrollments for secondary (grades 9-12) and postsecondary/adult students. The increase is reflected in both the enrollments reported by school districts for fiscal year 1978 and the projected enrollments presented in the Massachusetts Annual Program Plan for Vocational Education for Fiscal Year 1979.

	1977-1978 Reported Enrollments	1978-1979 Projected Enrollments	1978-1979 Reported Enrollments	Percent Change
Agriculture	3,865	4,237	3,564	- 7.8%
Distribution	9,297	10,157	10,707	+15.2%
Health	8,678	8,287	8,636	- 0.5%
C/H Non Occ.	27,961	21,092	29,026	+ 3.8%
C/H Occ. Prep.	5,648	6,471	4,070	-27.9%
Office	88,322	92,460	95,184	+ 7.3%
Technical	7,196	7,321	7,341	+ 2.0%
Trades/Industry	<u>55,729</u>	<u>60,195</u>	<u>55,068</u>	- 1.2%
TOTALS	206,696	210,220	213,596	+ 3.3%

## 2. Educational Levels

The following information is presented to indicate changes in educational levels for reported 1978-1979 enrollments as compared to what was projected in the fiscal year 1979 Annual Program Plan and reported enrollments for school year 1977-78:

	Enrollment Deviation From 1979 Projected			Enrollment Increase/Decrease From 1977-78 Report		
	Total	Second.	P.S./Adult	Total	Second.	P.S./
<u>1979 Programs</u>						
Agriculture	Lower Than Projected	Lower	Lower	Decrease	Decrease	Decrease
Distribution	Higher Than Projected	Slightly Lower	Higher	Increase	Increase	Increase
Health	Higher	Slightly Lower	Lower	Slight Decrease	Decrease	Increase
C/H Non. Occ.	Higher	Higher	Lower	Increase	Increase	Increase
C/H Occ. Prep.	Lower	Lower	Lower	Decrease	Decrease	Decrease
Office	Higher	Higher	Higher	Increase	Increase	Increase
Technical	Higher	Higher	Lower	Increase	Increase	Increase
Trades/Industry	Lower	Lower	Lower	Slight Decrease	Decrease	Increase

### 3. Types of Institutions Offering Programs

The information concerning the types of institutions offering programs is presented in the comprehensive table on Enrollments, Costs, Levels and Institutions, following this narrative. It is not possible to include CETA data by six digit U.S.O.E. codes at this time.

### 4. Cost of Programs

The detail of program costs at the six-digit level is pro-rated for the comprehensive table following this narrative. The estimated expenditures presented here is the most accurate available data on cost of programs and serves as the basis of the pro-rated costs.

#### Estimated Expenditures F.Y. 1979

		<u>State and Local</u>		
		<u>Secondary</u>	<u>Postsecondary</u>	<u>Federal</u>
01.0100	Agriculture	\$ 2,998,825		
04.0000	Distribution	5,091,882		
07.0000	Health	5,679,409		P.L. 94-482
09.0100	C/H Non Occ.	14,461,491	TOTAL	\$10,224,640
09.0200	C/H Occ. Prep.	3,414,988	\$36,811,963	Awarded by
14.0000	Office	37,626,068		State Board
16.0000	Technical	4,700,198		
17.0000	Trades/Industry	62,889,633		

### B. Funding to Meet Employment Needs

Analysis of employment data used to assess current and future needs for workers (job skills) for Fiscal Year 1979 indicated a need for federal funding (Public Law 94-482) in 42 program areas (O.E. Codes).

Of the forty-two programs which were expected to increase because of data indicating a statewide net demand, thirty-eight (91%) actually had an increase in enrollments during Fiscal Year 1979, either at the secondary (grades 9-12) level and/or the postsecondary and adult level.

In comparison between projected and reported 1979 enrollments for these same forty-two programs is slightly less favorable. Ten programs with a statewide need for workers (job skills) demonstrated an increase in both the secondary and postsecondary/adult levels above the increase projected in the Fiscal Year 1979 Annual Program Plan. Ten programs had increases above projections at the postsecondary/adult levels. Seven programs had increases above projections at the secondary (grades 9-12) level. And, fifteen programs did not reach the enrollment level projected for Fiscal Year 1979, even though eleven of these programs reflected actual increases over the Fiscal Year 1978 level.

The following comprehensive table displays the forty-two programs, which were expected to reflect increases due to employment demand and indicates the results for each program.

7.3 COMPREHENSIVE TABLE

O.E.	O.E. TITLE	PROGRAMS BY TYPE OR INSTITUTION										1979			1979			1979 Estimated Expenditures		
		DEMAND										Annual Plan			Reported			Secondary		
												Projected			Enrollments			P. S./Adult		
												Secondary	P. S./Adult	Secondary	Federal	State/Local	Federal	State/Local	Federal	State/Local
01.0000	Total, Agriculture											1,925	2,312	1,804	1,760	2,998,825	105,501	1,250,560		
01.0100	Agricultural Production											570	485	314	280	521,554		198,800		
01.0200	Agricultural Supplies Services											15	110	4	62	6,644		44,020		
01.0300	Agricultural Mechanics											110	50	82	90	136,202		61,900		
01.0400	Agricultural Products	(3)										50	210	89	252	147,829	10,996	178,920		
01.0500	Ornamental Horticulture	(1)										720	976	870	604	1,445,507	74,292	428,840		
01.0600	Agricultural Resources											55	120	51	115	84,711		95,850		
01.0700	Forestry											100	55	154	44	255,794		31,240		
01.0900	Other Agriculture											305	306	240	295	400,584		209,450		
04.0000	Total, Distribution											7,667	2,490	7,366	3,341	5,091,882	264,739	2,373,934		
04.0100	Advertising Services											65	101	96	25	66,316	3,075	17,750		
04.0200	Apparel and Accessories	(3)										100		133	72	91,903	8,856	51,120		
04.0300	Automotive	(1)										65		277	37			26,270		
04.0400	Finance and Credit											29	156	102	153	70,482	18,819	108,630		
04.0500	Flintistry											15	30	3		2,073				
04.0600	Food Distribution	(4)										1,197	29	170	15	117,470	1,845	10,650		
04.0700	Food Services											630	50	1,022	463	706,202		128,730		
04.0800	General Merchandising	(4)										6,065	821	3,580	126	2,473,780	15,498	89,460		
04.0900	Hardware, Building Materials											31	25	20		13,820				
04.1000	House Furnishings											13	93	4	39	2,764		27,690		
04.1100	Hotel and Lodging	(3)										58	384	62	569	42,842	69,987	403,990		
04.1200	Industrial Marketing	(2)										42	179	5	304	3,455	37,392	215,840		
04.1300	Insurance	(3)										27	27	89	51	61,499	6,273	36,210		
04.1400	International Trade											15	15			33,168				
04.1500	Personal Services											60	105	48	126	8,983	89,460			
04.1600	Petroleum											10		13		62,190				
04.1700	Real Estate	(3)										27	27	90	396	1,382	48,708	281,160		
04.1800	Recreation and Tourism	(2)										21	265	2	310	2,073	38,130	220,100		
04.1900	Transportation	(2)										59	81	3	127	892,081	15,621	90,170		
04.2000	Retail Trade, Other											103	102	1,291	530	73,246		176,300		
04.3100	Wholesale Trade, Other											15		106		174,726				
04.9900	Other													208						

PROGRAMS BY TYPE OR INSTITUTIONS												
O.E.	O.E. TITLE	EMPLOYMENT DEMAND	1979					1979				
			Annual Plan					Reported				
			Projected					Enrollments				
			Secondary		P.S./Adult			Secondary		P.S./Adult		
			Enrollments		P.S./Adult			Enrollments		P.S./Adult		
			P.S./Adult		P.S./Adult			P.S./Adult		P.S./Adult		
			P.S./Adult		P.S./Adult			P.S./Adult		P.S./Adult		
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O.E.	O.E. TITLE	PROGRAMS BY TYPE OR INSTITUTIONS										1979 Annual Plan Projected Enrollment		1979 Reported Enrollment		1979 Estimated Expenditures			
		EMPLOYMENT**										Secondary	P.S./Adult	Secondary	P.S./Adult	Federal	State/Local	Federal	State/Local
		DEMAND																	
		RV	V	C	CC	P													
09.0200	Total, Occupational Preparation											3,602	2,869	3,021	1,049	75,194	3,414,988	7,641	745,162
09.0201	Care and Guidance of Children	6	1	23	0							1,498	844	1,120	802		1,265,600		569,420
09.0202	Clothing Mgt., Production & Services (4)3		1	6								482	1,505	201	22	3,016	227,130	2,706	15,620
09.0203	Food Mgt., Production & Services	9		13								1,330	390	928	136		1,048,864		96,560
09.0204	Home Furnishings, Equip. & Services	1		4								50		324	12		166,120		8,520
09.0205	Institutional & Home Mgt. & Services (1)4		1	2								142	55	342	40	5,520	386,460	4,920	28,400
09.0299	Other	1		3	1							100	75	106	37		118,522		26,270
14.0000	Total, Office											76,892	15,568	77,753	17,431	5,146,039	37,626,068	1,327,269	12,385,525
14.0100	Accounting & Computing Occupations	(2)2										16,243	2,935	16,065	3,769	2,216,970	7,775,460	463,587	2,675,990
14.0201	Computer & Console Operations	(3)0										1,086	575	1,268	740	174,984	613,712	91,020	525,400
14.0203	Programware	5	1	19	7							229	66	401	884		194,084		627,640
14.0299	Other Business Data Processing	10	1	66	7							2,155	1,580	2,597	1,059		1,256,948		7,518,890
14.0300	Filing, Office Mach., Clerical Occ.	(2)1										8,954	388	6,553	414	904,314	3,176,652	50,922	293,940
14.0400	Information Communications Occ.	(4)2										427	119	332	30	45,816	160,688	3,690	21,300
14.0500	Materials Support, Transportation	(4)										452	58	217		29,946	105,028		
14.0600	Personnel Training & Related Occ.											1,553	279	1,839	89		890,076		63,190
14.0700	Steno. Secretarial & Related Occ.	(4)										13,370	4,668	11,903	4,477	1,642,614	5,761,052	55,067	1,178,670
14.0800	Supervisory & Admin. Mgt. Occ.	(4)										973	2,368	823	1,339	113,574	398,332	164,697	950,690
14.0900	Typing & Related Occ.	6										11,000	2,340	12,035	1,363	15,504,940	8,787,010	967,730	621,250
14.9900	Other	1										450	202	3,605	875				
16.0000	Total, Technical											488	6,833	912	6,429	50,407	4,700,198	180,311	4,564,590
16.0101	Aeronautical Technology											15	70	38	55		195,852		39,050
16.0104	Architectural Technology	1	1	3	1							40	45	47	102		242,238		72,420
16.0104	Automotive Technology												120	45	146		231,930		103,660
16.0105	Chemical Technology	1										66	34	29	9		149,406		6,390
16.0106	Civil Technology												380	157					111,470
16.0107	Electrical Technology	(1)	1	3	2							27	253	54	150	7,452	278,316	18,450	106,500
16.0108	Electronic Technology	(3)4	1	6	7							214	984	265	1,071	36,570	1,365,810	131,733	760,410
16.0109	Electromechanical Technology	(1)2	1		5							35	320	45	242	6,210	231,930	29,766	171,820
16.0110	Environmental Control Technology												220	84					59,640
16.0111	Industrial Technology	1										45	60		8				5,680
16.0113	Mechanical Technology		1	1	4								125	77			123,696		54,670
16.0114	Metallurgical Technology		1	2	1								20	83	54		427,782		38,340

O.E.	O.E. TITLE	PROGRAMS BY TYPE OF INSTITUTIONS						1979 Annual Plan Projected Enrollments		1979 Reported Enrollments		1979 Estimated Expenditures		
		BV	V	C	CC	P		Secondary	P.S./Adult	Secondary	P.S./Adult	Federal	State/Local	P.S./Adult
16.0117	Scientific Data Technology							19	153					
16.0601	Commercial Pilot Training											2,952	17,040	
16.0602	Fire and Fire Safety Technology											84,009	484,930	
16.0605	Police Science	3	9	9						273		235,422	1,358,940	
16.9900	Other											207,379		
												232,668	1,453,178	
17.0000	Total, Trades and Industry							42,400	17,795	39,483	15,585	898,870	62,889,633	11,073,858
17.0100	Air Conditioning (1)	13		6				440	345	604	387	83,352	962,172	274,770
17.0200	Appliance Repair	5		4				170	85	269	39	428,517	428,517	27,690
17.0300	Automotive Services							41						
17.0300	Body and Vehicle Repair	19		16				1,670	700	1,766	545		2,813,238	386,950
17.0301	Auto Mechanic	23	1	47				5,045	1,765	4,438	1,427		7,069,734	1,013,170
17.0302	Other Automotive	4		9				500	170	302	104		481,086	
17.0399	Aviation Occupations			1				20		9	41		14,337	73,840
17.0400	Blueprint Reading	3		3				130	185	18	157		28,674	29,110
17.0500	Business Machine Maintenance							36	40					111,470
17.0600	Commercial Art Occupations (2)	13		6				722	320	985	119	135,910	1,569,105	84,490
17.0700	Commercial Photo Occupations	2		2				134	38	116	90		184,788	84,490
17.0900	Carpentry	23	1	38				4,171	1,726	3,896	1,268		6,206,328	63,900
17.1001	Electricity	20		27				2,611	1,092	2,432	1,026		3,874,176	908,280
17.1002	Heavy Equipment Operator & Maint.							27						728,460
17.1003	Masonry	8		4				248	191	364	126		579,852	89,460
17.1004	Painting and Pipefitting							31	23					
17.1005	Other Construction and Maint.	16	1	12				1,505	915	1,039	912	1,655,127	1,655,127	647,520
17.1009	Custodial Services (4)	8		11				986	167	627	182		998,811	129,220
17.1100	Hotel Maintenance	5		2				79		9		1,242	14,337	
17.1200	Drafting Occupations							370	75	235	38		374,355	26,980
17.1300	Electrical Occupations	23	1	40				2,845	325	2,512	327		4,001,616	232,170
17.1400	Electronic Occupations	7	1	12				1,145	501	887	175		1,412,991	124,250
17.1500	Electric Maintenance Services (4)	22	1	31				2,040	879	2,522	913		4,017,546	662,430
17.1600	Food Maintenance Supervisor and Mgt. Dev.							45	15					85,200
17.1700	Graphic Arts Occupations	17	1	40				1,000	770	2,671	120		4,254,903	536,760
17.1800	Instrument Maintenance and Repair	2		1				250	83	76	21		121,068	14,910
17.2100	Maritime Occupations (3)	3		2				142	12	195	12		310,635	8,520
17.2200	Machine Shop (4)	22	1	30				3,365	1,105	3,063	914	1,476	4,879,359	648,940
17.2302	Machine Tool Operation (4)							54	156	16			25,488	
17.2403	Sheet Metal	10		17				1,090	285	912	324		1,452,816	230,040
17.2405	Welding and Cutting	17	1	13				578	1,275	893	1,172		1,422,549	832,120
17.2407	Tool and Die Making										76			53,960

O.E.	O.E. TITLE	PROGRAMS BY TYPE OF INSTITUTIONS						1979 Annual Plan Projected Enrollees		1979 Reported Enrollees		1979 Estimated Expenditures			
		RV	V	C	CC	P	F	Secondary	P.S./Adult	Secondary	P.S./Adult	Federal	State/Local	Federal	State/Local
17.2399	Other Metalworking Occs.	4		2				1,143	62	326	88		519,318		62,480
17.2400	Metalurgy Occupations	6		14				575	180	756	120		1,204,308		85,200
17.2602	Cosmetology	16	2	19	1	1		1,083	245	1,458	232		2,322,594		164,720
17.2700	Plastics Occupations	2		2				25	65	48	73		76,464		51,830
17.2801	Fireman Training				3				365		204				144,840
17.2802	Law Enforcement Training (2)				4				685		740				525,400
17.2899	Other Public Services				1				335		98			91,020	
17.2900	Quantity Foods (3)	12	2	15	1	1		1,224	508	1,520	549	209,760	2,421,360	67,527	389,790
17.3000	Refrigeration	3		1				25	18	151	18		240,543		12,780
17.3100	Small Engine Repair	10		17	1			767	444	654	461		1,041,822		327,310
17.3200	Stationary Energy Sources Occ.	3		1				50	245	85	91		135,405		64,610
17.3300	Textile Production & Fabrication (4)	1		2				130		99		13,662	157,707		
17.3400	Leather Working							45		5			7,965		
17.3500	Upholstering	4		2				1,740	495	192	69		305,856		48,990
17.3600	Woodworking Occupations	7		20				925	445	1,718	350		2,736,774		248,500
17.9900	Other	12		19	2			950	461	1,883	867				615,510

RV - Regional Vocational Technical Schools  
V - City Trade or Vocational Schools  
C - Comprehensive High School and Other Secondary Schools  
CC - Community Colleges  
P - Other Postsecondary Educational Institutions

#### EMPLOYMENT DEMAND

- 4-1 - Secondary Higher than Projected
- 2 - Post-Secondary and Adult Higher than Projected
- 3 - Both Secondary and Post-Secondary - Adult Higher than Projected
- 4 - Lower than Projected

#### 7.4.1 ANALYSIS OF THE DISTRIBUTION OF FUNDS FOR FISCAL YEAR 1979

##### Policies and Procedures for Determining Applicant Eligibility to Receive Federal Funds

##### Economic, Social and Demographic Factors Relating to the Need for Programs

In the Commonwealth of Massachusetts it can generally be said that the greatest concentration of persons who have economic, social, and other problems which provide barriers to vocational education occur in the major urban centers and rural areas. Primarily this is due to the relative concentration or sparsity of the State's population in those areas. To determine more precisely which cities and towns in the State required priority consideration in the awarding of Federal Vocational Education funds, the following formula was developed.

##### A. Relative Ability to Provide Resources

In Massachusetts the ability of a particular city or town to provide the necessary resources to support educational programs is in large part a function of the property tax base for a given community, a portion of which supports education. The measure used to determine the relative ability of local education agencies to provide resources is the equalized valuation per capita index for each agency in the Commonwealth. The index for each city or town is the ratio of equalized valuation per capita for a given city or town divided by the statewide average for all cities and towns. This index is then used to rank all cities and towns. Those with the greatest ability to provide resources rank higher than those with less ability on a scale from 1 (high) to 351 (low). In the formula used to determine the final distribution of federal funds among eligible agencies, this factor is assigned the highest weight in relation to other factors used.

##### B. Relative Number or Concentration of Low-Income Families

There are several measures that are used to determine the relative concentration of low-income families in Massachusetts. These include (1) the areas designated as eligible for ESEA Title I funds; (2) the ranking of cities and towns based on personal incomes reported; and (3) median family income of all cities and towns in the Commonwealth.

There is a statistical correlation between the number of ESEA Title I students personal income and median family incomes such that the relative rankings for each city and town on these variables is essentially the same. Therefore, since the best available data is for median family incomes, this factor is used to determine the concentration of low-income families.

### C. Using the Factors to Distribute Funds

The first step in determining the distribution of funds was to determine the priority among eligible recipients on each of the two most important factors (relative ability to provide resources and concentration of low-income families). The measures used to establish this priority were, in the case of relative ability to provide resources, the equalized valuation per capita (EV/CAP) for each of the 351 cities and towns in Massachusetts. In the case of low-income families, the measure used was the median family incomes (MFI) as determined for each of the cities and towns. Each city or town with the lowest EV/CAP was ranked "1" and the city or town with the lowest MFI was ranked "1". Once these rankings were established for each city and town, the ranks were summed to provide a single measure of "poorness".

The next step in distributing the resources was to assign a value to each city and town based upon its ranking. The value assigned was a score from 1 to 30 points. Thirty (30) points was chosen merely as a method for giving weight to this "poorness" measure in the overall formula for the distribution of funds and was chosen for mathematical purposes only. A value for each city or town was arrived at by distributing each of the 351 cities and towns, by rank, along a continuum from 1 to 30. The city or town with the highest rank on the poorness measure (EV/CAP-MFI) would be assigned a lower mathematical value than a city or town with a lower rank on the poorness measure (see attachment).

Once each city and town had been assigned a value for poorness, the next step in the distribution of funds was to determine the relative amount of dollars a city or town would receive. In order to move from a point value to dollars, it was necessary that a base starting point be established from which all cities and towns would be figured. It was determined that the smallest wealthier community should receive no less than \$3,000.00, a minimum amount with which to support some vocational education activity on the local level. It was also determined that the largest poorer community should receive no more than \$1.3 million, an amount necessary to have some significant impact on a large occupational education delivery system. Using the city of Boston as the largest poorer community, a per pupil allocation was arrived at by dividing approximately \$1.3 million by Boston's total enrollments in grades 9-12. The base per pupil allocation for Boston was determined to be \$60.00.

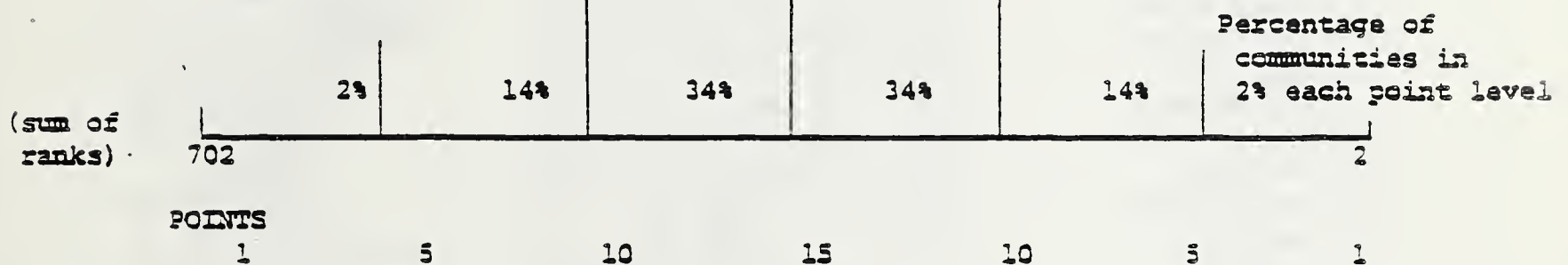
Thus, all cities and towns whose poorness value was greater than Boston would have a higher per pupil allocation and those with a lower value, a lesser per pupil allocation. Per pupil allocations were determined for each city or town based upon their value as related to poorness (1-30 points). This per pupil allocation was then multiplied by the secondary enrollment to arrive at a total allocation for each city and town, regional school district and other eligible recipient (e.g. county agriculture and independent trade schools). The distribution of funds to a regional school district was based on data computed and weighed for each of the member towns of a given district such that the enrollment of that school district and the proportionate contribution of member towns determines the basis for the allocation.

All communities with a delivery system were selected to receive federal funds. The method used to assign points was as follows:

The Index Rank of each of the 351 cities and towns based upon their Relative Ability to Provide Resources (EV/CAP) added to the Index Rank of each of the 351 cities and towns based upon their Median Family Income (MFI) applied on a continuum of 1 to 30 points.

EXAMPLE

$$\frac{\text{EV/CAP}}{347} \quad \& \quad \frac{\text{MFI}}{306} \quad = \quad \frac{\text{TOTAL}}{653}$$



TOTAL of Index Points plotted into chart

#### 7.4.2 Distribution of Funds During Fiscal Year 1979

The following list is a distribution of Public Law 94-482 Fiscal Year 1979 funds by Subpart and by eligible recipient.

SECONDARY SCHOOL SYSTEMS	SUBPART			
	2	3	4	5
Fall River	113,253	17,544	39,000	15,594
Boston	1,125,497	103,739	150,000	73,206
Chelsea	61,901	6,712		5,967
New Bedford	115,343	15,652	46,000	15,899
North Adams	61,652	6,684		5,849
Lawrence	77,591	8,044		7,580
Lowell	51,086	17,059	39,700	
Somerville	185,291	20,092	40,000	17,859
Springfield	420,412	40,133	70,000	38,719
Webster	29,510	3,250		2,660
Winchendon	22,385	2,427		2,158
Belchertown	18,127	1,966		1,747
Holyoke	57,400	14,107		
Northbridge	31,467	3,412		3,003
Ware				
Ayer	22,740	5,063		3,761
Chicopee	165,029	17,799		
Fairhaven	42,166	4,581		
Fitchburg	78,166	8,475		7,533
Gardner	5,251			
Haverhill	88,066	12,009		10,639
Lynn	213,728	21,018		20,605
Taunton	89,113	10,819		8,164
Uxbridge	23,091	2,504		2,225
Worcester	309,114	33,645	51,000	16,246
Leicester	24,193	2,624		2,322
Middleboro	40,254	4,365		3,880
Monson	15,396	1,670		1,484
Brockton	150,619	25,531		22,665
Cambridge	73,046	11,299		9,999
Newburyport	26,295	2,851		2,534
N. Brookfield	10,986	1,702		1,513
Oxford	33,819	3,660		3,260
Palmer	25,697	2,768		2,477
Southbridge	31,354	3,400		3,022
Dracut	45,490	4,196		4,641
Easthampton	31,957	3,465		3,080
Milford	47,434	5,864		2,302
Millbury	25,292	3,055		1,556
Northhampton	46,772	5,270		4,646
Rockland	49,748			4,795
Tyngsboro	11,030	1,196		1,064
Bellingham	38,008	4,447		2,479
Clinton	29,980	3,261		2,831
Douglas	6,032	654		581
Granby	19,342	2,098		1,864
Malden	11,275			10,025
Revere	52,974	9,233		8,360
Leominster	76,190	8,200		4,551

SECONDARY SCHOOL SYSTEMS CONT.	SUBPART			
	2	3	4	5
Ludlow	53,529	5,804		5,160
South Hadley	39,440	4,270		3,723
Attleboro		6,590		
Greenfield	37,460	4,221		
Hull	26,542			2,910
Mansfield	27,190	2,948		2,622
Medford	119,930	13,005		10,686
Norton	8,485	2,009		1,269
Swansea	21,353	2,965		2,955
Franklin	51,285	5,561		
Hopedale	9,827	1,065		948
Hudson	31,850	3,452		3,067
Lunenburg	20,480	2,221		1,924
North Attleboro	33,793	4,089		3,545
Pittsfield	66,562	18,728		10,941
Westfield	72,139	7,829		6,959
Winthrop	30,046	4,073		3,620
Abington	28,410	3,080		2,719
Sutton	9,950	1,031		959
Billerica	65,828	3,630		4,915
E. Bridgewater	16,075			
Gloucester	18,011	6,077		5,350
Holbrook	25,886	2,822		2,510
Methuen	56,553	5,742		5,103
Quincy	142,432	15,444		
Salem	54,837	6,568		5,936
Westport				
Grafton				
Maynard	16,188	1,755		1,490
Provincetown				
Wareham				
Agawam	41,425	4,492		3,993
Amesbury	22,941			
Bourne	20,162			1,390
Hatfield		538		379
Lee	15,376	1,721		1,531
Marlboro	35,312	3,867		3,437
Southwick	19,246	2,087		1,855
Stoughton	50,225	5,446		
Westford	16,804	2,603		
Auburn	25,229	2,833		2,391
Dartmouth	26,712	2,200		
Georgetown	6,689			921
Harwich	4,172	1,208		
Nantucket		673		599
Randolph	57,022	6,183		5,062
Tewksbury	46,160	5,185		4,366
Watertown	44,313	4,805		4,271
W. Bridgewater	8,024			
Weymouth	110,877	40,701		10,959
Beverly	15,364	6,695		
Chatham				
Easton	23,935	2,595		2,306

SECONDARY SCHOOL SYSTEMS CONT.	SUBPART			
	2	3	4	5
Everett	44,372	3,175		4,160
Hadley	4,975	539		480
Ipswich	10,533	1,635		728
Medway	12,738	1,940		1,753
Melrose	48,831	5,248		4,707
Peabody	77,240	8,435		7,440
Shrewsbury	8,554	3,613		1,643
Arlington	42,825	5,814		5,155
Hopkinton	8,653	935		834
Lenox	8,507	923		820
Marshfield	26,900			
Millis	10,500			1,011
North Reading	20,376	2,210		1,569
Sandwich	4,444			
W. Springfield	32,711	4,250		3,788
Barnstable		3,242		
Chelmsford	53,289	5,777		5,485
Foxboro	19,867	2,387		2,121
Falmouth				
Norwood	40,510	4,854		4,322
Rockport	11,702			
Saugus	3,741			
Stoneham	29,455	2,815		1,057
Wakefield	34,629	3,715		3,338
Ashland		1,245		1,115
Holliston	18,354	1,990		1,755
Seekonk	16,692	1,816		1,615
Waltham	61,406	6,658		5,919
Woburn	52,708	5,715		5,081
Avon	5,866	636		566
Littleton	5,317	850		759
Reading	21,627	1,917		2,783
Walpole	23,995	2,652		2,358
West Boylston	8,049	887		785
Wilmington	22,152			
Danvers				
East Longmeadow	16,528	1,813		1,612
Hanover	12,770	1,385		
Medfield	12,360	1,340		1,188
Natick	25,433	5,285		6,950
North Andover	16,565	1,796		1,472
Scituate	22,929	2,486		2,210
Somerset	19,610			
Westboro	13,771	1,492		1,007
Braintree	24,481	3,848		3,421
Dedham	12,177	2,475		2,204
Framingham		3,778		
Hingham	19,346	2,098		1,865
Milton	17,290	1,875		1,516
Sharon	12,933	1,402		1,247
Brookline	20,018	1,795		1,930

SECONDARY SCHOOL SYSTEMS CONT.	SUBPART			
	2	3	4	5
Harvard				
Lynnfield				
Newton	52,404	5,840		5,190
Swampscott				
Andover	16,457	1,781		1,584
Bedford	11,221	1,217		1,082
Belmont	12,798	1,388		1,233
Burlington	19,082	2,069		1,839
Canton	11,529	1,250		1,081
Duxbury				
Winchester				
Cohasset	4,064	440		392
Lexington	18,178	1,409		1,707
Longmeadow	9,806	1,064		941
Manchester	2,702			
Marblehead	3,342			
Needham	16,795	1,827		1,624
Wayland	6,130	1,076		740
Wellesley	9,400	1,025		910
Westwood	5,800	629		560
Weston	2,602	319		284
<hr/>				
INDEPENDENT				
TRADE SCHOOLS				
<hr/>				
Northhampton-				
Smith	19,623	2,133		
Worcester Trade				
Complex	59,777	7,198		6,557
<hr/>				
COUNTY AGRI-				
CULTURE SCHOOLS				
<hr/>				
Bristol				
Essex	6,718	1,041		
Norfolk				

ACADEMIC REGIONAL SCHOOLS	SUBPART			
	2	3	4	5
Blackstone- Millville	31,146			
Narraganset	28,074	3,044		2,706
Athol-Royalston	36,842			
Adams-Cheshire	15,874	6,130		
Ralph C. Mahar				
Spencer-East				
Brookfield	34,000	3,763		
Dudley-Charlton	8,414			3,168
Quabbin	25,688	2,785		2,477
Gill-Montague	24,930			
North Middlesex	41,338	4,323		3,781
Warren-West				
Brookfield	19,808	2,148		
Mohawk Trail	20,272			
Mendon-Upton	13,691	1,485		1,315
Pentucket	31,892	3,383		3,076
Whitman-Hanson		4,700		
Central Berkshire	32,100	3,515		3,129
Frontier		3,950		
Gateway	15,905			1,533
Martha's Vineyard	10,189			
Bridgewater-				
Raynham	28,815			
Freetown-Lakeville	16,207			2,100
Hampshire	18,505	2,006		1,784
Pioneer Valley	6,147			1,081
Silver Lake	29,124	5,879		
Tantasqua	32,250	3,550		
Dighton-				
Renoboth	21,876	3,389		3,012
King Philip	38,400	4,164		3,702
Mount Greylock	20,215			1,600
South Berkshire	11,230	1,218		1,082
Triton	23,276			2,245
Ashburn-				
Westminster	15,872			
Plymouth-Carver	33,026	5,183		4,742
Amherst-Pelham	31,492	3,277		3,025
Berkshire Hills	19,785	2,145		1,908
Berlin-Boylston	9,350	1,000		911
Dennis-Yarmouth	7,797	3,676		3,146
Wachusett	19,048	2,065		1,650
Nashoba	18,073	1,960		1,741
Groton-Dunstable	8,400			810
Hampden-Wilbraham	32,702	3,545		3,152
Nauset	12,783	1,387		1,233
Northboro-				
Southboro	21,212	2,300		2,045
Old Rochester	11,469	1,244		1,105
Acton-Boxboro	15,658	1,708		1,524
Hamilton-Wenham	6,045			
Masconomet	14,721			
Concord-Carlisle		1,146		1,120
Lincoln-Sudbury	8,867	1,485		1,228
Dover-Sherborn		278		

REGIONAL VOCATIONAL TECHNICAL SCHOOLS	SUBPART			
	2	3	4	5
Greater Lowell	101,479	11,004		9,781
G. New Bedford				
N. Berkshire	19,765	2,143		
G. Fall River	18,274	4,100		3,780
Greater Lawrence	77,813	8,000		6,660
Montachusett	42,488			
Pathfinder	95,000	8,434		7,496
Blackstone Valley	39,688	3,003		
Bristol-Plymouth	105,418	3,061		
S. Worcester	36,887			2,940
Whittier	55,452	6,014		5,346
Franklin County	21,860	2,485		
Southeastern	21,650			
Old Colony	7,910			
Assabet Valley	34,950			
Northeast				
Metropolitan				
Upper Cape Cod	13,912			
South Shore	5,663			
Tri County	16,426	6,409		1,561
Cape Cod				
Nashoba Valley	3,623	9,948		
Shawsheen Valley	30,299	2,603		2,315
Blue Hills	20,780			
North Shore	8,915			
Minuteman		1,129		
South Middlesex	14,308	1,550		1,314

<u>Community College</u>	<u>Region</u>	<u>Subpart 2 Proposed Distribution</u>
Bunker Hill	1	\$163,985
Roxbury	1	109,084
Bristol	4	67,188
Springfield	5	353,544
Holyoke	5	85,916
Quinsigamond	3	77,431
Mount Wachusett	3	116,999
Northern Essex	2	178,502
Massasoit	4	14,650
Greenfield	6	91,340
Berkshire	6	24,016
Massachusetts Bay	1	51,478
Middlesex	2	165,235
North Shore	2	89,330
Cape Cod	4	<u>26,598</u>
		\$1,615,296

## 7.5 Results Achieved

- A. Number of students served in programs funded under Section 120, 130, 140 and 150 including non-profit private school students are as follows:

Estimated 6/30/79  
Enrollments Supported  
with Federal Funds

### Section 120

Handicapped	3,874
Disadvantaged	8,679
Limited English Speaking	501
Post Secondary/Adult	8,095
Other Vocational Education Secondary	3,401
Cooperative	2,110
Industrial Arts	17,102
Entrepreneurship	150
Displaced Homemakers	500
Interagency Industry Specific	187

### Section 130

Exemplary	Statewide
Curriculum	Statewide
Vocational Guidance and Counseling	105,352
Personnel Training	2,855
Grants to Overcome Sex Bias	2,087

### Section 140

741

### Section 150

Economically Depressed Areas	28,243
Other	8,675

### 7.6.1 Evaluation of Programs

The Massachusetts Annual Accountability Report for Vocational Education for Fiscal Year 1978 described in detail the methods and content for the evaluation of vocational education programs (see Section 7.0 Evaluations, pp. 41-43). The use of evaluations for program improvement was also presented. The methods and procedures for evaluation are currently being restructured for greater efficiency, validity, reliability, and usefulness in formulating recommendations for the improvement, development, and expansion of local programs and services. The Plans for Evaluation of Occupational Education Programs for fiscal years 1981 and 1982 are presented in this document (Three Year Plan, Section 1.7).

The following evaluation activities occurred during fiscal year 1979:

1. There were 725 Public Law 94-482 programs approved for fiscal year 1979.

The eligible recipients filed 3,056 Quarterly Progress Reports (QPR's) for these programs and many of the fiscal year 1978 programs.

The QPR's were prepared by the eligible recipients and covered such items as progress toward objectives, projected enrollments, fiscal accountability, and successes and shortcomings of the programs. All of the QPR's were reviewed for accuracy by regional and central Department of Education staff.

Of the 725 P.L. 94-482 programs funded for fiscal year 1979, 189 were monitored on site.

312 Final Reports were filed by eligible recipients and reviewed by State staff. Many of these Final Reports were fiscal year 1978 federally funded projects.

2. There were 69 school districts whose vocational programs were evaluated through the Chapter 74 State Monitoring process. Over 400 programs were evaluated in the 69 school districts. 42 school districts were monitored on site, the remaining school districts filed self evaluations.
3. Comprehensive Chapter 74 Program Audits were conducted in nine school districts by evaluation teams consisting of state agency personnel and instructors and specialists in vocational education from institutions outside the school systems being evaluated.

The results of the evaluation of federal programs were used to improve new projects proposed by school districts. The results of the evaluation of state and locally funded programs were used to assist the school in improving the on-going vocational programs and services for students.

APPENDIX C

LOCAL PLAN

FOR

OCCUPATIONAL/VOCATIONAL EDUCATION

(FORM BPRE-3)



1.5 LOCAL PLAN FOR OCCUPATIONAL/VOCATIONAL EDUCATION**MASSACHUSETTS DEPARTMENT OF EDUCATION, DIVISION OF OCCUPATIONAL EDUCATION  
LOCAL PLAN FOR OCCUPATIONAL/VOCATIONAL EDUCATION**

Local Education Agency (LEA) \_\_\_\_\_ LEA CODE \_\_\_\_\_

Chief Administrative Officer \_\_\_\_\_ Telephone \_\_\_\_\_

Address \_\_\_\_\_

Person Coordinating Local Plan \_\_\_\_\_ Telephone \_\_\_\_\_

Education Region \_\_\_\_\_ Labor Market Area \_\_\_\_\_

I do certify that all information contained in this local plan is true and correct and that all federal funds (P.L. 94-482) will be used as stipulated in the accompanying application(s).

\_\_\_\_\_  
type name signature date  
(Chief Administrative Officer)

\_\_\_\_\_  
type name signature date  
(Chairperson, School Committee/Board)

I do certify that this plan addresses the elimination of bias, discrimination and stereotyping (race, sex, ethnicity and linguistic ability) in program content and access.

\_\_\_\_\_  
type name signature date  
(Title IX/Chapter 622 Coordinator)

I do certify that this plan is consistent with the Education of the Handicapped State Plan.

\_\_\_\_\_  
type name signature date  
(Local Director/Coordinator, Special Education)

I do certify that a Local Advisory Council was established for the development of this plan as well as the development of all local applications for P.L. 94-482 federal vocational education funds.

\_\_\_\_\_  
type name signature date  
(Chairperson, Local Advisory Council)

I do certify that the proposed activities in this plan relate constructively to employment and training programs conducted by prime sponsors and that coordination with existing education and training resources is occurring.

\_\_\_\_\_  
type name signature date  
(Chairperson, Area Manpower Advisory Committee for the CETA Prime Sponsor/Subgrantee)

I do certify that all information contained in this local plan is consistent with the overall occupational education plans of the school district.

\_\_\_\_\_  
type name signature date  
(Local Occupational Education Coordinator)

I certify that this plan was developed in collaboration with the regional vocational technical school district of which this school system is a member and an opportunity to comment has been given.

\_\_\_\_\_  
type name signature date  
(Superintendent Director, Regional Vocational Technical School District)

**Table 1 — Local Advisory Council**

**Purpose of Table 1:**

- To reduce reporting requirements — submission of membership will be required only once annually for all federal Vocational Education Funds (Public Law 94-482).
- To advise local education agency on the purpose and composition of a Local Advisory Council.
- To reduce replication of advisory councils and assist in the development of all federally funded vocational education projects (Public Law 94-482).

**Background:**

- Each local education agency must have an operating Local Advisory Council to be eligible for federal (Public Law 94-482) vocational education funds. Membership on this council may come from existing committees and councils as listed below. The LEA should keep minutes of Local Advisory Council meetings and utilize the expertise of the Council throughout the year.

**Requirements: 1. Establishment of Local Advisory Councils (Required by Public Law 94-482)**

- The local advisory council shall be composed of representatives of the general public, including representatives from business, industry, and organized labor.
- The local advisory council must have an appropriate representation of both sexes and an appropriate representation of the racial, ethnic, and linguistic minorities and handicapped persons in the programs, schools, community or region which the local advisory council serves.
- An eligible recipient of federal funds may form an advisory council composed of representatives from several craft committees or representatives of several school councils (Title I PAC, SPED, etc.) having the requested representation mentioned above.

**2. Duties of Local Advisory Councils**

- The local advisory council shall advise on current job needs and the relevance of programs and courses being offered by the LEA. The local advisory council shall consult with the local education agency in developing its applications to the Board of Education.

TABLE 1 Local Advisory Council  
Membership Composition and Representation

LINE NO.	NAME OF REPRESENTATIVE (LAST NAME, FIRST)	CITY OR TOWN OF RESIDENCE	COMPOSITION (CHECK IF APPLICABLE)			TYPE OF REPRESENTATION (CHECK ONE AND ONLY ONE BOX FOR EACH NAME LISTED)							
			HANDI- CAPED	RACE OR ETHNICITY MINORITY	FEMALE	LABOR	INDUSTRY	BUSINESS	EDUCATION	STUDENT	PARENT	COMMUNITY	OTHER AGENCY
	COLUMN 1	COLUMN 2	COL 3	COL 4	COL 5	COL 6	COL 7	COL 8	COL 9	COL 10	COL 11	COL 12	COL 13
10													
20													
30													
40													
50													
60													
70													
80													
90													
100													

**Table 2 — Student Needs**

- Purpose of Table 2:**
- Needs Assessment — To allow the school district to determine local student needs in an organized manner and to indicate a rationale (source document) for determining the need.
  - To provide the state with a comprehensive assessment of local needs for planning purposes.
- Background:**
- Many school districts have engaged in local planning for quite some time. This approach in developing a local needs assessment provides the state a better method in identifying occupational/vocational needs and addressing those needs in the State Plan for Vocational Education.
- Requirements:**
- The local educational agency must determine the immediate and future occupational/vocational education needs of all students so that they may be enrolled in programs offered by the school without respect to local, state and federal funding sources.
  - There must be a reason(s) for selecting students to be served other than the availability of federal funds. A rather extensive list of source documents is displayed to assist the school district in documenting need. Most of these documents have been generated by the school district for reporting purposes. All documents used for planning are to be kept on file by the LEA.

**Source Documents (which may serve as bases for planning)**

**Policy Documents**

1. Board Policy on Occupational Education
2. State Plan for Vocational Education
3. Guidance and Counseling: A Position Paper of the State Board of Education
4. Joint Policy of Occupational Education (State Board and Community Colleges)
5. Governor's Policy and Youth Employment and Training
6. Governor's Youth Action Plan

**Data Reports Generated by LEA**

7. October Individual School Reports
8. October School System Summary Report
9. October Enrollments in Occupational Education
10. October Special Education Report
11. January School Census
12. Distribution of High School Graduates
13. March Completion Report / Occupational Education

14. Alternative Education Survey
15. Racial Composition Status Reports
16. Annual Admissions Update
17. Budget Supplement Report (Higher Education)
18. Chapter 74 Reimbursement Informational Returns
19. U.S. Office of Civil Rights Survey
20. U.S. Office of Civil Rights Report
21. End of Year Pupil and Financial Report

**Evaluations and Plans**

22. Title I Evaluations and Plans
23. Chapter 756 Implementation Plan
24. Quarterly Progress Reports
25. Chapter 74 Program Audit Reports
26. Chapter 622 Self Evaluation
27. Title IX Self Evaluation
28. Statewide Assessment Program
29. Existing Plans Generated by LEA (documented)
30. Attitudinal Survey

31. Student Poll (documented)
  32. Parent Poll (documented)
  33. Local Survey (documented)
  34. Other Self Evaluations (documented)
- Demographic and Employment Documents**
35. United States Census
  36. State Census
  37. Labor Market Information (State or Local)
  38. Higher Education General Information Survey (HEGIS)
  39. Documented Employer Survey

**Other Documents (Specify:)**

40. \_\_\_\_\_
41. \_\_\_\_\_
42. \_\_\_\_\_

LEA NAME \_\_\_\_\_

LEA CODE \_\_\_\_\_

FORM (BPRE-3)

**TABLE 2 Student Needs  
by Type of Population**

LINE NO.	TYPE OF STUDENT NEED (SPECIAL POPULATION OR OTHER):	NEEDS ARE ADEQUATELY ADDRESSED BY CURRENT PROGRAMS			THERE IS A NEED TO:			CODE NUMBERS FOR SOURCE DOCUMENTS USED <sup>2</sup> TO ESTABLISH NEED					
		INCREASE ENROLLMENTS <sup>1</sup>		INCREASE SUPPORT SERVICES <sup>1</sup>	YES	NO	YES	NO	C. 8	C. 9	C. 10	C. 11	C. 12
		YES COL. 1	NO COL. 2										
10	Handicapped CHAPTER 766 ELIGIBLE												
	Disadvantaged:												
20	Economic												
30	Academic												
40	Limited English Proficiency												
50	Minorities												
60	Females In Traditionally Male Programs												
70	Males in Traditionally Female Programs												
80	Other Students (Specify) _____												
90	Other Student Needs (Specify) _____												

1 Check appropriate "YES" or "NO" boxes

2 See Page 4 for source documents code numbers  
(Specify between one and five source documents)

**Table 3 — Program Needs  
Vocational/Occupational Skills Training by U.S.O.E. Codes**

- Purpose of Table 3:**
- To allow the school district to determine skills training program needs in an organized manner and to use employment data to justify need.
  - To provide the state with the basis for determining projected program needs.
- Background:**
- Many school districts have a need to identify programs which present students with the best entry level employment potential and to establish two or three year programs of intensive skills training which will best serve the students.
- Requirements:**
- List all new programs and any current programs which are expected to have a programmatic need or change in the manner displayed on Table 3.
  - Address only programs for grades 9 through 14.
  - Do not include on Table 3: Industrial Arts, single courses or programs that would best be labelled as pre-vocational, exploratory, etc.
  - Programs to be discontinued are to be listed in the Narrative.

OE CODE	INSTRUCTIONAL PROGRAM	OE CODE	INSTRUCTIONAL PROGRAM	OE CODE	INSTRUCTIONAL PROGRAM
<b>AGRICULTURAL PROGRAMS</b>		<b>HEALTH PROGRAMS (CONT.)</b>		<b>TRADE AND INDUSTRY PROGRAMS</b>	
01.0100	Agriculture Production	07.0800	Mental Health Technology	17.0100	Air Conditioning
01.0101	Animal Science	07.0903	Installation Therapy Technology	17.0200	Appliance Repair
01.0102	Plant Science	07.0904	Medical Assistant	17.0301	Body and Fender Repair
01.0200	Agriculture Supplies/Services	07.0906	Health Aide	17.0302	Auto Mechanics
01.0300	Agricultural Mechanics	07.0907	Medical Emergency Technician	17.0399	Automotive, Other
01.0400	Agricultural Products	07.0909	Mortuary Science	17.0400	Aviation Occupations
01.0500	Ornamental Horticulture	07.9900	Dietary Aide	17.0500	Business Machine Maintenance
01.0600	Agricultural Resources	07.9900	Medical Record Technology	17.0700	Commercial Art Occupations
01.0604	Wildlife Ecology			17.0800	Commercial Fishery Occu.
01.0700	Forestry			17.0900	Commercial Photo. Occu.
<b>DISTRIBUTIVE EDUCATION PROGRAMS</b>		<b>CONSUMER AND HOMEMAKING OCCUPATIONAL PREPARATION PROGRAMS</b>		17.1001	Carpentry
04.0100	Advertising Services	09.0201	Care and Guidance of Children	17.1002	Electricity
04.0200	Apparel and Accessories	09.0202	Clothing Mgmt., Prod. and Serv.	17.1004	Masonry
04.0300	Automotive	09.0203	Food Mgmt., Prod. and Services	17.1007	Plumbing & Piping/fitting
04.0400	Finance and Credit	09.0204	Home Furnishing, Educ. & Serv.	17.1099	Const. & Maint. Trades, Other
04.0500	Fashion	09.0205	Inst. & Home Mgmt. & Services	17.1100	Custodial Service
04.0600	Food Distribution			17.1200	Diesel Mechanic
04.0700	Food Services			17.1300	Drafting Occupations
04.0800	General Merchandise			17.1400	Electrical Occupations
04.0900	Hardware, Building Materials			17.1500	Electronic Occupations
04.1000	Home Furnishings			17.1500	Fabric Maintenance Services
04.1100	Hotel and Lodging			17.1700	Foreman/Supv. & Mgmt. Dev.
04.1200	Industrial Marketing			17.1900	Graphic Arts Occupations
04.1300	Insurance			17.2000	Industrial Atomic Energy Occu.
04.1400	International Trade			17.2100	Inst. Maint. & Repair Occu.
04.1500	Personal Services			17.2200	Maritime Occupations
04.1600	Petroleum			17.2302	Machine Shop
04.1700	Real Estate			17.2303	Machine Tool Occupations
04.1800	Recreation and Tourism			17.2305	Sheet Metal
04.1900	Transportation			17.2306	Welding and Cutting
04.2000	Retail Trade, Other			17.2307	Tool and Die Making
04.3100	Wholesale Trade, Other			17.2399	Metamaking Occupations, Other
04.9900	Small Business Management			17.2400	Metallurgy Occupations
<b>HEALTH PROGRAMS</b>				17.2601	Barbering
07.0101	Dental Assistant	16.0101	Aerospace Technology	17.2602	Cosmetology
07.0102	Dental Hygienist (Assoc. Degree)	16.0103	Architectural Technology	17.2699	Personal Services, Other
07.0103	Dental Laboratory Technology	16.0104	Automotive Technology	17.2700	Plastics Occupations
07.0199	Dental, Other	16.0105	Chemical Technology	17.2801	Freightliner Training
07.0203	Medical Laboratory Assistant	16.0106	Civil Technology	17.2802	Law Enforcement Training
07.0299	Medical Lab. Technology, Other	16.0107	Electrical Technology	17.2899	Public Services, Other
07.0301	Nursing (Associate Degree)	16.0108	Electronic Technology	17.2900	Quantity Food Occupations
07.0302	Practical (Vocational) Nursing	16.0109	Electromechanical Technology	17.3000	Refrigeration
07.0303	Nursing Assistant (Aide)	16.0110	Environmental Control Technology	17.3100	Small Engine Repair
07.0305	Surgical Technology	16.0111	Industrial Technology	17.3200	Stationary Energy Sources Occu.
07.0399	Nursing, Other	16.0112	Instrumental Technology	17.3300	Textile Production & Fabrication
07.0401	Occupational Therapy	16.0113	Mechanical Technology	17.3400	Leather Working
07.0402	Physical Therapy	16.0114	Metallurgical Technology	17.3500	Unions/Training
07.0499	Rehabilitation, Other	16.0117	Scientific Data Technology	17.3600	Woodworking Occupations
07.0501	Radiologic Technology	16.0401	Programmer		
07.0503	Nuclear Medical Technology	16.0402	Systems Analyst Technology		
07.0599	Radiologic, Other	16.0601	Commercial Pilot Training		
07.0600	Ophthalmic	16.0602	Fire & Fire Safety Technology		
07.0700	Environmental Health	16.0603	Forestry Technology		
		16.0604	Oceanographic Technology		
		16.0605	Police Science		
		16.9900	Packaging Technology		
		16.9901	Air Pollution Technology		
		16.9902	Water & Waste Water Technology		

N.B. — For new and emerging programs and programs not included in this list use closest applicable code or write title.

LEA NAME \_\_\_\_\_

LEA CODE \_\_\_\_\_

**TABLE 3 Program Needs**  
**Vocational/Occupational Skills Training by U.S.O.E. Code**

LINE NO.	PROGRAM (6 DIGIT O.E. CODE)	TYPE OF PROGRAM NEED*								SOURCE OF EMPLOYMENT DATA TO JUSTIFY PROGRAM NEED: (CHECK ONE BOX ONLY)			
		BEGIN NEW PROGRAM		PROGRAM MODIFICATION OR UPGRADING		EXPAND EXISTING PROGRAM		CONTINUE OR MAINTAIN AN EXISTING FEDERALLY FUNDED PROGRAM		STATEWIDE DEMAND LIST	LOCAL LABOR MARKET PACKAGE	DOCU- MENTED LOCAL SURVEY	OTHER
		YES	NO	YES	NO	YES	NO	YES	NO				
	COLUMN 1	C. 2	C. 3	C. 4	C. 5	C. 6	C. 7	C. 8	C. 9	COL 10	COL 11	COL 12	COL 13
10													
20													
30													
40													
50													
60													
70													
80													
90													
100													
110													
120													
130													
140													
150													
160													
170													
180													
190													

\*Answer "YES" or "NO" to each type of program need

**Table 4 — Other Program Needs**  
**Vocational/Occupational Programs Which Support Skills Training**

- Purpose of Table 4:**
- To allow the school district to determine other program needs to support the skills training programs.
  - To provide the state with a comprehensive overview of programmatic needs for planning purposes and to best indicate the use of funding resources.
- Background:**
- In order to accommodate the needs for all students, those who have acquired skills training competencies, adults, dropouts, those seeking pre-vocational hands-on experience, those in need of counseling support, many schools have established or plan to establish programs which would supplement vocational/occupational education training. There is considerable flexibility in the choice of support programs which should be tailored to student needs and the needs of the school district.
- Requirements**
- Table 4 may be addressing the needs of students in grades 7 and 8 in the case of Industrial Arts as a pre-vocational introduction to the school districts skills training programs.
  - Consumer and Homemaking may be for students K through Adult and must be education for occupations in the home, combining the role of wage earner and homemaker, etc.
  - There are only two specified adult programs for Table 4 (Displaced Homemaker and Special Groups, Interagency Industry Specific); the school district may be desirous of establishing or expanding other adult programs such as Apprenticeship, Postsecondary, etc.
  - Do not list all current programs unless changes are expected as specified by the table itself.
  - The list of source documents used to establish need will be found on page 4.

LEA NAME \_\_\_\_\_

LEA CODE \_\_\_\_\_

**TABLE 4 Other Program Needs**  
**Vocational/Occupational Programs Which Support Skills Training**

LINE NO.		TYPE OF PROGRAM NEED <sup>1</sup>								CODE NUMBERS FOR SOURCE DOCUMENTS USED TO ESTABLISH NEED <sup>2</sup>														
		BEGIN NEW PROGRAM		PROGRAM MODIFICATION OR UPGRADING		EXPAND EXISTING PROGRAM		CONTINUE OR MAINTAIN AN EXISTING FEDERALLY FUNDED PROGRAM																
		YES	NO	YES	NO	YES	NO	YES	NO	C. 1	C. 2	C. 3	C. 4	C. 5	C. 6	C. 7	C. 8	COL 9	COL 10	COL 11	COL 12	COL 13		
10	COOPERATIVE EDUCATION																							
20	INDUSTRIAL ARTS																							
	ADULT:																							
30	INTERAGENCY/ INDUSTRY SPECIFIC																							
40	DISPLACED HOMEMAKER & OTHER SPECIAL																							
50	OTHER ADULT: _____ _____																							
60	ENTREPRE- NEURSHIP																							
70	VOC GUIDANCE/ COUNSELING																							
80	CONSUMER/ HOMEMAKING																							
	OTHER PROGRAMS (SPECIFY):																							
90																								
100																								
110																								
120																								

<sup>1</sup> Answer "YES" or "NO" TO EACH TYPE OF PROGRAM NEED<sup>2</sup> See page 4 for source document code numbers

(Specify between one and five source documents used)

Table 5 — Program Improvement

## PROGRAM IMPROVEMENT

The school district may see needs to improve its vocational/occupational education delivery system in the following areas, using federal or state/local resources (check all applicable):

Source Documents Used to Establish Need (numbers from page 4):

- ☐ IN-SERVICE TRAINING  
CURRICULUM DEVELOPMENT (SPECIFY PROGRAM AREA(s)):

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---

---

- ☐ EVALUATION  
☐ PLANNING  
☐ RESEARCH (SPECIFY AREA (s)):

---

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- ☐ PROGRAMS TO OVERCOME SEX BIAS  
EXEMPLARY AND INNOVATIVE PROGRAMS (SPECIFY):

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## Planning Narrative

A. Short and Long Range Plans — Describe plans for addressing the vocational/occupational needs identified above. Include the following items:

- Summarize the present status of occupational/vocational education in the school district.
- State overall long and short range occupational/vocational education goals.
- Indicate planned percentage increases in enrollments among special populations.
- Describe plans for improving vocational/occupational education programs for the handicapped (mainstreaming, separate programs, etc.), minorities, disadvantaged, and limited English proficiency students.
- Describe overall plans for eliminating sex stereotyping in programs.
- Indicate current program offerings which will be eliminated and reasons for change.
- Describe resources available to implement plans: federal, state and local.

FORM (BPPE-3)

B. Collaboration — Describe the relationship of plans to existing programs and facilities in the area.

- Coordination between sending schools and area regional vocational technical schools, collaboration among regional vocational technical schools, comprehensive and academic high schools, community colleges.
- Cooperative arrangements with business and industry.
- Arrangements with other human service and training agencies (CETA, private, state, etc.).
- Use of and coordination among advisory councils.
- Describe plans in relation to the Governor's Youth Action Plan, and Board Policy on Occupational Education.

FORM (BPPE-3)

C. PLANS FOR USE OF FEDERAL FUNDS — Even though the needs assessment (Tables 1-5) and the local plan statements (A. above) addresses identified needs and plans which are to be supported by funding from all sources (federal, state and local), there must be a relationship between the school district's Local Plan for Vocational/Occupational Education and its application(s) for federal funds (Public Law 94-142, Vocational Education). This section of the Narrative must describe how the federal funds will be used to address some of the identified needs and address some of the stated local goals.

## APPENDIX D

### LOCAL NEEDS ASSESSMENT



## 1.0 USE OF FUNDS FOR PROGRAM (PURPOSES) NEEDS

The purpose of this section of the Massachusetts Three Year Plan for Vocational Education is to report to the general public the changes in the Five Year Plan (1978-1982) which effect funding levels of each subpart and purpose of Public Law 94-482, Title II, Vocational Education.

The Three Year Plan is an implementation or program plan, closer in time to the actual distribution and expenditure of federal funds. The Five Year Plan, on the other hand, is a long range plan based on both projected expenditures and projected enrollments. For example, three years ago, when the Five Year Plan was written it was projected that the federal funds for Section 120 Basic Grant would total approximately \$13 million for Fiscal Year 1981 and the projected total for Section 140 - Special Disadvantaged would be \$870,000. The most recent estimate for fiscal year 1981 federal funds is, \$14 million for Section 120 and \$508,000 for Section 140.

In addition to funding level changes, programmatic emphases may change due to state and local occupational education needs. For example, three years ago, it was projected that there would be a local demand of \$1.6 million in federal funds for cooperative education. Many school districts have instead chosen to use basic grant funds for vocational education skills training rather than cooperative education. This does not mean that there is a decreased emphasis on cooperative education. School districts actually reported a significant increase in the expenditure of state and local funds for cooperative education.

Finally there are programmatic changes reflected in the Three Year plan which indicate the most recent statewide occupational education policies responding to updated social, educational and economic needs of the citizens and which indicate administrative procedures to address such policies.

### 1.1 - 1.7 These sections contain the following information:

1.1 Local Needs Assessment - Tables 1 and 2 are derived from data submitted by school districts in a new local planning document, summarized for each of the six education regions of the Commonwealth; Table 1 lists student needs by type of population while Table 2 lists programs needs other than regular vocational education;

1.2 Funding Levels for Fiscal Years 1981 and 1982 (Fiscal Year 1980 has already been submitted to and approved by the United States Office of Education);

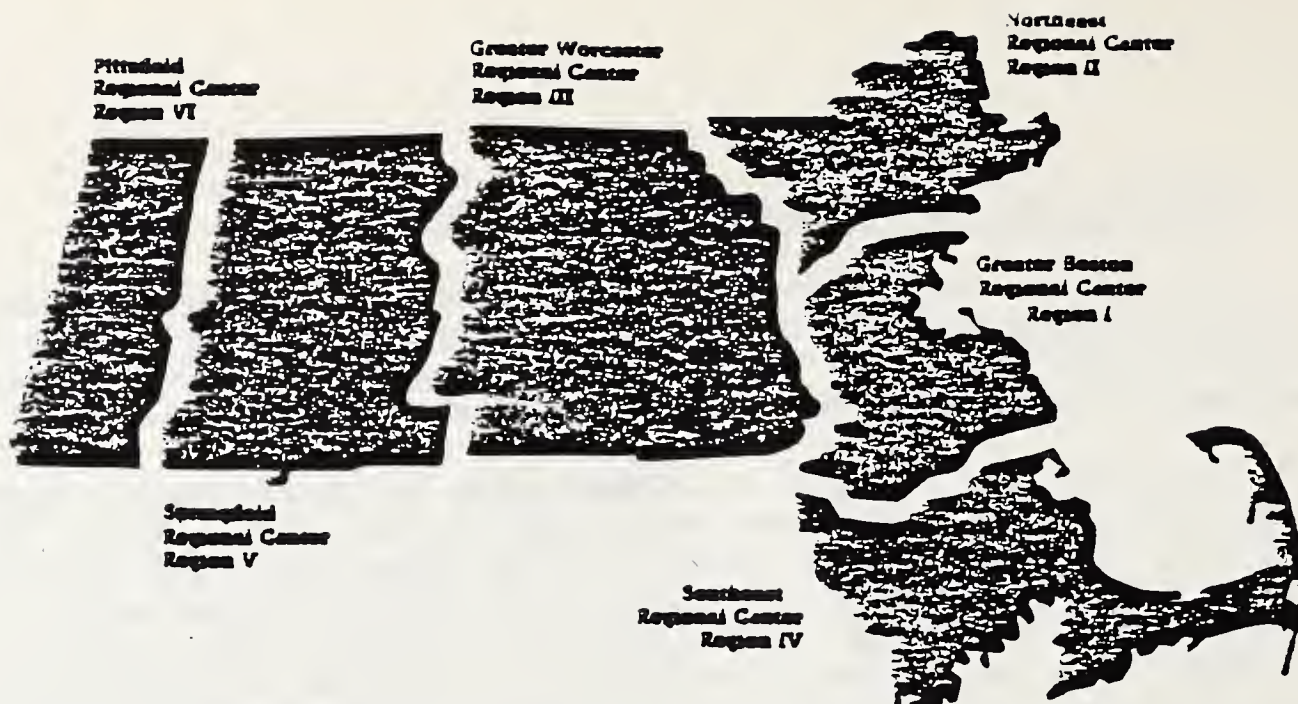
1.3 Narrative for the Use of Funds for Fiscal Years 1981 and 1982;

1.4 Local Planning Booklet which describes in detail the procedures for accessing funds by program category;

1.5 Local Plan for Occupational/Vocational Education (Form BPRE-3) used to reflect the needs of school districts and plans to meet those needs;

1.6 Local Application (Form BPRE-4) for P.L. 94-482 funds;

1.7 Plans for Evaluation.



1.1.1 Table 1 shows the percentage of school districts that identified specific student needs. Sections A-F summarize these results by region.

Each local education agency was required to assess the immediate and future occupational/vocational education needs of all students without regard to local, state and federal funding. In order to assist the school district in justifying need, an extensive list of possible source documents was provided (see Page 4 of the Local Plan).

The following needs assessment questions were addressed by school districts for each of the designated special populations:

- 1. Are needs adequately address by current programs?
- 2. If not, is there a need to increase enrollments and/or support services? ---

According to school districts in all regions of the Commonwealth, the vocational education needs of minorities were more adequately considered by current programs than were the needs for any other designated population. Their needs were being met from a range of 55% in the Northeast to 29% in the Greater Boston Region. Obviously, if a minority were handicapped, disadvantaged, or female, additional student needs would have to be assessed.

Student needs reported as least adequately addressed were not consistent among the regions, evidenced as follows:

- Region I - Handicapped
- II - Academic Disadvantaged
- III - Females in Traditionally Male Programs
- IV - Handicapped and Academic Disadvantaged
- V - Handicapped
- VI - Economic and Academic Disadvantaged

School districts in all regions of the Commonwealth expressed a greater need to increase enrollments of females in traditionally male programs (90%-100%), with the least need arising for enrollments of those with limited English proficiency and minorities (12%-54%).

The need to increase support services for handicapped students was expressed by most school districts (100% in the Springfield region), while limited English and minorities again showed that little additional assistance was necessary.

TABLE 1A

STUDENT NEEDS BY TYPE OF POPULATION:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
GREATER BOSTON EDUCATION REGION I

LINE NO.	TYPE OF STUDENT NEED (SPECIAL POPULATION OR OTHER):	NEEDS ARE ADEQUATELY ADDRESSED BY CURRENT PROGRAMS			THERE IS A NEED TO:			
					INCREASE ENROLLMENTS		INCREASE SUPPORT SERVICES	
		YES	NO	NOT APPLICABLE	YES	NO	YES	NO
		COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7
10	Handicapped CHAPTER 766 ELIGIBLE (%)	8	92	0	79	21	94	6
	Disadvantaged: (%)							
20	Economic (%)	13	87	0	73	27	93	7
30	Academic (%)	10	90	0	73	27	88	12
40	Limited English Proficiency (%)	13	67	21	43	57	68	32
50	Minorities (%)	29	68	4	71	29	83	17
60	Females In Traditionally Male Programs (%)	12	85	3	100	0	94	6
70	Males in Traditionally Female Programs (%)	3	91	6	94	6	88	13

TABLE 1B

STUDENT NEEDS BY TYPE OF POPULATION:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
NORTHEAST EDUCATION REGION II

LINE NO.	TYPE OF STUDENT NEED (SPECIAL POPULATION OR OTHER):	NEEDS ARE ADEQUATELY ADDRESSED BY CURRENT PROGRAMS			THERE IS A NEED TO:			
		YES	NO	NOT APPLICABLE	INCREASE ENROLLMENTS		INCREASE SUPPORT SERVICES	
					YES	NO	YES	NO
		COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7
10	Handicapped CHAPTER 766 ELIGIBLE (%)	18	82	0	92	8	92	8
	Disadvantaged: (%)							
20	Economic (%)	30	70	0	73	27	80	20
30	Academic (%)	9	91	0	92	8	100	0
40	Limited English Proficiency (%)	25	33	42	33	67	63	37
50	Minorities (%)	55	18	27	25	75	38	62
60	Females In Traditionally Male Programs (%)	25	67	8	92	8	92	8
70	Males in Traditionally Female Programs (%)	25	67	8	83	17	92	8

TABLE 1C

STUDENT NEEDS BY TYPE OF POPULATION:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
CENTRAL MASSACHUSETTS EDUCATION REGION III

LINE NO.	TYPE OF STUDENT NEED (SPECIAL POPULATION OR OTHER):	NEEDS ARE ADEQUATELY ADDRESSED BY CURRENT PROGRAMS			THERE IS A NEED TO:			
					INCREASE ENROLLMENTS		INCREASE SUPPORT SERVICES	
		YES	NO	NOT APPLICABLE	YES	NO	YES	NO
		COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7
10	Handicapped CHAPTER 766 ELIGIBLE (%)	20	80	0	79	21	96	4
	Disadvantaged: (%)							
20	Economic (%)	23	74	4	76	24	84	16
30	Academic (%)	15	85	0	85	15	96	4
40	Limited English Proficiency (%)	27	22	51	48	52	58	42
50	Minorities (%)	32	21	47	38	62	50	50
60	Females In Traditionally Male Programs (%)	15	85	0	98	22	89	11
70	Males in Traditionally Female Programs (%)	17	80	4	94	6	87	13

TABLE 1D

STUDENT NEEDS BY TYPE OF POPULATION:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
SOUTHEAST EDUCATION REGION IV

LINE NO.	TYPE OF STUDENT NEED (SPECIAL POPULATION OR OTHER):	NEEDS ARE ADEQUATELY ADDRESSED BY CURRENT PROGRAMS			THERE IS A NEED TO:			
					INCREASE ENROLLMENTS		INCREASE SUPPORT SERVICES	
		YES	NO	NOT APPLICABLE	YES	NO	YES	NO
		COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7
10	Handicapped CHAPTER 766 ELIGIBLE (%)	8	92	0	87	13	97	3
	Disadvantaged (%)							
20	Economic (%)	15	85	0	82	18	87	13
30	Academic (%)	8	92	0	78	22	90	10
40	Limited English Proficiency (%)	18	38	44	50	50	65	35
50	Minorities (%)	39	32	29	56	44	53	47
60	Females In Traditionally Male Programs (%)	19	81	0	100	0	87	13
70	Males in Traditionally Female Programs (%)	22	78	0	100	0	86	14

TABLE 1E

STUDENT NEEDS BY TYPE OF POPULATION:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
SPRINGFIELD EDUCATION REGION V

LINE NO	TYPE OF STUDENT NEED (SPECIAL POPULATION OR OTHER):	NEEDS ARE ADEQUATELY ADDRESSED BY CURRENT PROGRAMS			THERE IS A NEED TO:			
					INCREASE ENROLLMENTS		INCREASE SUPPORT SERVICES	
		YES	NO	NOT APPLICABLE	YES	NO	YES	NO
		COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7
10	Handicapped CHAPTER 766 ELIGIBLE (%)	4	96	0	39	11	100	0
	Disadvantaged: (%)							
20	Economic (%)	12	88	0	35	15	57	43
30	Academic (%)	11	89	0	39	11	65	35
40	Limited English Proficiency (%)	20	40	40	58	42	67	33
50	Minorities (%)	32	32	37	58	42	46	54
60	Females In Traditionally Male Programs (%)	8	92	0	92	8	65	35
70	Males in Traditionally Female Programs (%)	12	88	0	39	11	61	39

TABLE 1F

STUDENT NEEDS BY TYPE OF POPULATION:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
PITTSFIELD EDUCATION REGION VI

LINE NO.	TYPE OF STUDENT NEED (SPECIAL POPULATION OR OTHER):	NEEDS ARE ADEQUATELY ADDRESSED BY CURRENT PROGRAMS			THERE IS A NEED TO:			
					INCREASE ENROLLMENTS		INCREASE SUPPORT SERVICES	
		YES	NO	NOT APPLICABLE	YES	NO	YES	NO
		COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7
10	Handicapped CHAPTER 766 ELIGIBLE (%)	33	58	8	55	45	75	25
	Disadvantaged: (%)							
20	Economic (%)	23	69	8	56	44	82	18
30	Academic (%)	23	69	8	50	50	64	36
40	Limited English Proficiency (%)	20	10	70	33	67	20	80
50	Minorities (%)	42	17	42	40	60	33	67
60	Females In Traditionally Male Programs (%)	33	50	17	91	9	64	36
70	Males in Traditionally Female Programs (%)	18	64	18	90	10	55	45



1.1.2 Table 2 shows the percentage of school districts that identified specific support programs and services. Sections A-F summarize these results by region.

Each local education agency was required to assess the need for these support programs and services without regard to the availability of local, state, or federal funds. An extensive list of possible source documents was again provided.

Aggregating data across all six education regions indicates that over half of the school districts have determined a need for new programs in the areas of displaced homemakers and other adult programs such as apprenticeship, evening practical arts and supplemental (upgrading of skills) which support skills training. On the other hand, 67% and 77% respectively of the state regions do not find a need to begin new programs in cooperative education or industrial arts. Parallel to this assessment, 59% of the school districts do not plan new interagency/industry specific adult offerings, entrepreneurship, vocational guidance/counseling, consumer and homemaking programs. These findings are not surprising as most LEA's already have well-established programs, in the areas of cooperative education, industrial arts, vocational guidance and consumer/homemaking.

Indeed, while school districts will not be planning new programs, they intend to modify, upgrade or expand existing offerings in the area of cooperative education, industrial arts, vocational guidance and counseling, consumer/homemaking and other adult programs. Finally, with the exception of vocational guidance and consumer/homemaking programs, most school districts do not request federal funds for maintenance and continuation of existing federally funded support programs. Such programs, if already existing, will be funded exclusively with local funds.

TABLE 2A

VOCATIONAL/OCCUPATIONAL PROGRAM NEEDS  
WHICH SUPPORT SKILLS TRAINING:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
GREATER BOSTON EDUCATION REGION I

LINE NO		TYPE OF PROGRAM NEED							
		BEGIN NEW PROGRAM		PROGRAM MODIFICATION OR UPGRADING		EXPAND EXISTING PROGRAM		CONTINUE OR MAINTAIN AN EXISTING FEDERALLY FUNDED PROGRAM	
		YES	NO	YES	NO	YES	NO	YES	NO
		C. 1	C. 2	C. 3	C. 4	C. 5	C. 6	C. 7	C. 8
10	COOPERATIVE EDUCATION (%)	41	59	80	20	75	25	36	64
20	INDUSTRIAL ARTS (%)	46	55	86	14	83	17	25	75
	ADULT:								
30	INTERAGENCY/ (%) INDUSTRY SPECIFIC	69	31	14	86	63	38	29	71
40	DISPLACED HOMEMAKER (%) & OTHER SPECIAL	64	36	22	78	44	56	33	67
50	OTHER ADULT: _____ (%)	67	33	43	57	70	30	56	44
60	ENTREPRE- NEURSHIP (%)	60	40	17	83	33	67	20	80
70	VOC GUIDANCE/ COUNSELING (%)	50	50	86	14	100	9	67	33
80	CONSUMER/ HOMEMAKING (%)	18	82	86	14	95	5	56	44

TABLE 23

VOCATIONAL/OCCUPATIONAL PROGRAM NEEDS  
WHICH SUPPORT SKILLS TRAINING:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
NORTHEAST EDUCATION REGION II

LINE NO.		TYPE OF PROGRAM NEED							
		BEGIN NEW PROGRAM		PROGRAM MODIFICATION OR UPGRADING		EXPAND EXISTING PROGRAM		CONTINUE OR MAINTAIN AN EXISTING FEDERALLY FUNDED PROGRAM	
		YES	NO	YES	NO	YES	NO	YES	NO
		C. 1	C. 2	C. 3	C. 4	C. 5	C. 6	C. 7	C. 8
10	COOPERATIVE EDUCATION (%)	33	67	50	50	51	49	28	72
20	INDUSTRIAL ARTS (%)	38	62	74	26	70	30	33	67
	ADULT:								
30	INTERAGENCY/ (%) INDUSTRY SPECIFIC	53	47	17	83	19	81	16	84
40	DISPLACED HOMEMAKER (%) & OTHER SPECIAL	54	46	12	89	19	82	8	92
50	OTHER ADULT: _____ (%)	22	78	21	79	21	79	25	75
60	ENTREPRE- NEURSHIP (%)	19	81	16	84	6	94	6	94
70	VOC GUIDANCE/ COUNSELING (%)	33	67	93	7	38	13	67	33
80	CONSUMER/ HOMEMAKING (%)	48	52	86	14	79	21	54	46

TABLE 2C

VOCATIONAL/OCCUPATIONAL PROGRAM NEEDS  
WHICH SUPPORT SKILLS TRAINING:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
CENTRAL MASSACHUSETTS EDUCATION REGION III

LINE NO.		TYPE OF PROGRAM NEED							
		BEGIN NEW PROGRAM		PROGRAM MODIFICATION OR UPGRADING		EXPAND EXISTING PROGRAM		CONTINUE OR MAINTAIN AN EXISTING FEDERALLY FUNDED PROGRAM	
		YES	NO	YES	NO	YES	NO	YES	NO
		C. 1	C. 2	C. 3	C. 4	C. 5	C. 6	C. 7	C. 8
10	COOPERATIVE EDUCATION (%)	44	57	45	55	65	35	17	83
20	INDUSTRIAL ARTS (%)	33	67	83	17	73	27	33	67
	ADULT:								
30	INTERAGENCY/ (%) INDUSTRY SPECIFIC	60	40	17	83	23	77	17	83
40	DISPLACED HOMEMAKER (%) & OTHER SPECIFIC	63	38	9	92	15	85	17	83
50	OTHER ADULT: _____ (%)	30	70	17	83	0	100	0	100
60	ENTREPRE- NEURSHIP (%)	60	40	15	85	24	77	14	86
70	VOC GUIDANCE/ COUNSELING (%)	42	58	86	14	38	12	54	46
80	CONSUMER/ HOMEMAKING (%)	57	43	82	18	68	32	44	56

TABLE 2D

VOCATIONAL/OCCUPATIONAL PROGRAM NEEDS  
WHICH SUPPORT SKILLS TRAINING:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
SOUTHEAST EDUCATION REGION IV

LINE NO.		TYPE OF PROGRAM NEED							
		BEGIN NEW PROGRAM		PROGRAM MODIFICATION OR UPGRADING		EXPAND EXISTING PROGRAM		CONTINUE OR MAINTAIN AN EXISTING FEDERALLY FUNDED PROGRAM	
		YES	NO	YES	NO	YES	NO	YES	NO
		C. 1	C. 2	C. 3	C. 4	C. 5	C. 6	C. 7	C. 8
10	COOPERATIVE EDUCATION (%)	41	59	83	17	73	27	20	80
20	INDUSTRIAL ARTS (%)	18	82	80	20	65	35	13	87
	ADULT:								
30	INTERAGENCY/ (%) INDUSTRY SPECIFIC	25	75	0	100	0	100	0	100
40	DISPLACED HOMEMAKER (%) & OTHER SPECIAL	20	80	0	100	0	100	0	100
50	OTHER ADULT: _____ (%)	29	71	0	100	33	67	0	100
60	ENTREPRE- NEURSHIP (%)	42	58	0	100	0	100	0	100
70	VOC GUIDANCE/ COUNSELING (%)	37	63	80	20	86	14	39	62
80	CONSUMER/ HOMEMAKING (%)	44	57	75	25	78	22	23	55

TABLE 2E

VOCATIONAL/OCCUPATIONAL PROGRAM NEEDS  
WHICH SUPPORT SKILLS TRAINING:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
SPRINGFIELD EDUCATION REGION V

LINE NO.		TYPE OF PROGRAM NEED							
		BEGIN NEW PROGRAM		PROGRAM MODIFICATION OR UPGRADING		EXPAND EXISTING PROGRAM		CONTINUE OR MAINTAIN AN EXISTING FEDERALLY FUNDED PROGRAM	
		YES	NO	YES	NO	YES	NO	YES	NO
		C. 1	C. 2	C. 3	C. 4	C. 5	C. 6	C. 7	C. 8
10	COOPERATIVE EDUCATION (%)	25	75	33	67	31	69	0	100
20	INDUSTRIAL ARTS (%)	0	100	47	53	1	99	18	32
	ADULT:								
30	INTERAGENCY/ (%) INDUSTRY SPECIFIC	1	99	9	91	0	100	0	100
40	DISPLACED HOMEMAKER (%) & OTHER SPECIAL	88	12	0	100	0	100	0	100
50	OTHER ADULT: _____ (%) _____	100	0	13	87	13	87	0	100
60	ENTREPRE- NEURSHIP (%)	9	91	0	100	0	100	0	100
70	VOC GUIDANCE/ COUNSELING (%)	20	85	89	11	94	6	33	17
80	CONSUMER/ HOMEMAKING (%)	5	95	43	57	40	60	72	28

TABLE 2F

VOCATIONAL/OCCUPATIONAL PROGRAM NEEDS  
WHICH SUPPORT SKILLS TRAINING:  
A SUMMARY OF DATA FOR SCHOOL DISTRICTS IN  
PITTSFIELD EDUCATION REGION VI

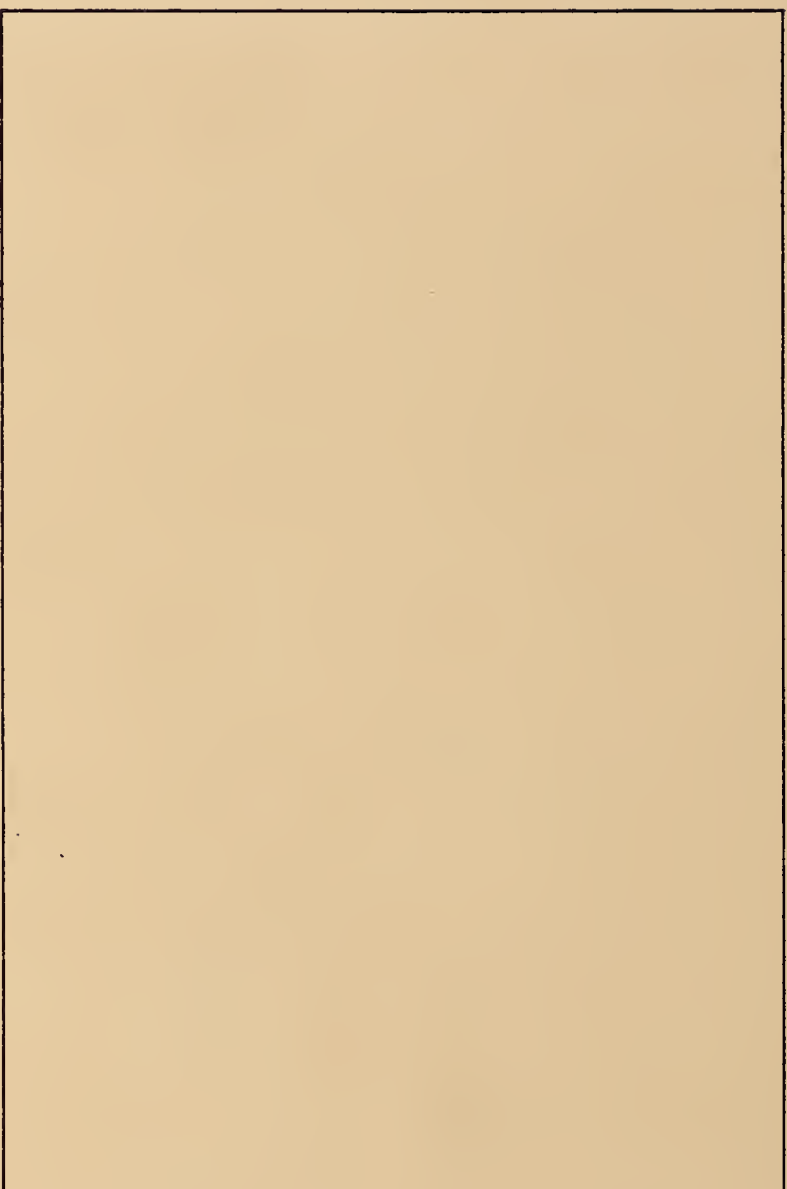
LINE NO.		TYPE OF PROGRAM NEED							
		BEGIN NEW PROGRAM		PROGRAM MODIFICATION OR UPGRADING		EXPAND EXISTING PROGRAM		CONTINUE OR MAINTAIN AN EXISTING FEDERALLY FUNDED PROGRAM	
		YES	NO	YES	NO	YES	NO	YES	NO
		C. 1	C. 2	C. 3	C. 4	C. 5	C. 6	C. 7	C. 8
10	COOPERATIVE EDUCATION (%)	14	86	67	33	67	33	20	80
20	INDUSTRIAL ARTS (%)	0	100	100	0	83	17	67	33
	ADULT:								
30	INTERAGENCY/ INDUSTRY SPECIFIC (%)	40	60	33	67	33	67	33	67
40	DISPLACED HOMEMAKER (%) & OTHER SPECIAL	25	75	0	100	0	100	0	100
50	OTHER ADULT: _____ (%)	100	0	100	0	100	0	100	0
60	ENTREPRE- NEURSHIP (%)	67	33	0	100	0	100	25	75
70	VOC GUIDANCE/ COUNSELING (%)	29	71	86	14	60	40	50	50
80	CONSUMER/ HOMEMAKING (%)	17	83	80	20	60	40	50	50





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